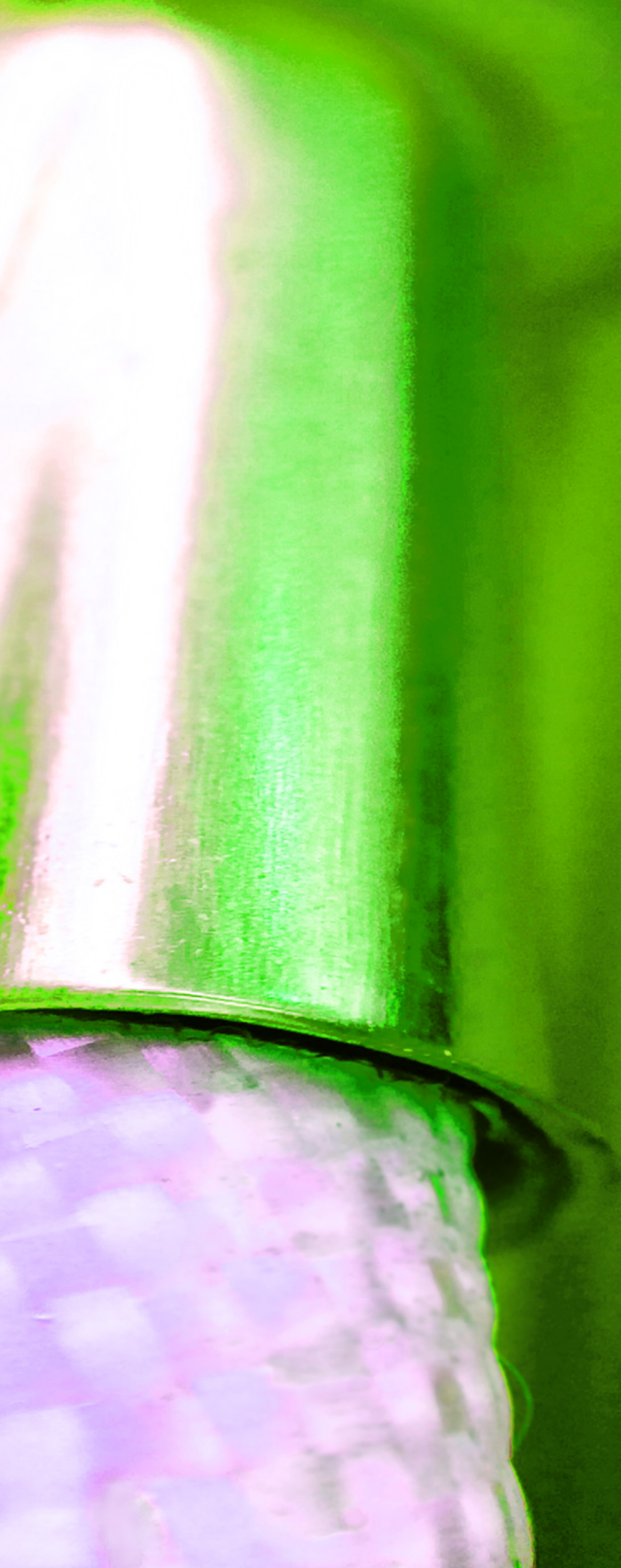




GENERAL CABLE CATALOGUE



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Assessed to ISO 9001:2015
LPCB Cert. No 988



Member of CISO Federation
CERTIFIED MANAGEMENT SYSTEM
BS OHSAS 18001



Member of CISO Federation
CERTIFIED MANAGEMENT SYSTEM
ISO 14001



GENERAL

CABLE CATALOGUE

CABLES FOR CIVIL AND INDUSTRIAL SAFETY PLANTS

Standard Version

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0222GCSNA+	2x0.22	2.9	122.0
SAS0422GCSNA+	4x0.22	3.4	122.0
SAS0622GCSNA+	6x0.22	3.9	122.0
SAS0822GCSNA+	8x0.22	4.1	122.0
SAS1022GCSNA+	10x0.22	4.8	122.0
SAS1222GCSNA+	12x0.22	4.9	122.0
SAC02500222GCSNB+	2x0.50 + 2x0.22	4.0	53.0 122.0
SAC02500422GCSNB+	2x0.50 + 4x0.22	4.5	53.0 122.0
SAC02500622GCSNB+	2x0.50 + 6x0.22	4.8	53.0 122.0
SAC02500822GCSNB+	2x0.50 + 8x0.22	5.4	53.0 122.0
SAC02501022GCSNB+	2x0.50 + 10x0.22	5.5	53.0 122.0
SAC02501222GCSNB+	2x0.50 + 12x0.22	5.7	53.0 122.0
SAC02750222GCSNB+	2x0.75 + 2x0.22	4.4	36.0 122.0
SAC02750422GCSNB+	2x0.75 + 4x0.22	4.8	36.0 122.0
SAC02750622GCSNB+	2x0.75 + 6x0.22	5.1	36.0 122.0
SAC02750822GCSNB+	2x0.75 + 8x0.22	5.7	36.0 122.0
SAC02751022GCSNB+	2x0.75 + 10x0.22	5.8	36.0 122.0
SAC02751222GCSNB+	2x0.75 + 12x0.22	6.0	36.0 122.0

ALARM CABLE

Standard Version for external use

CABLES FOR CIVIL AND INDUSTRIAL SAFETY PLANTS

Standard Version for external use

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0222IDSNA+	2x0.22	4.2	122.0
SAS0422IDSNA+	4x0.22	4.6	122.0
SAS0622IDSNA+	6x0.75	5.1	122.0
SAS0822IDSNA+	8x0.75	5.5	122.0
SAS1022IDSNA+	10x0.75	6.0	122.0
SAS1222IDSNA+	12x0.75	6.1	122.0
SAC02500222IDSNB+	2x0.50 + 2x0.22	5.2	53.0 122.0
SAC02500422IDSNB+	2x0.50 + 4x0.22	5.7	53.0 122.0
SAC02500622IDSNB+	2x0.50 + 6x0.22	6.0	53.0 122.0
SAC02500822IDSNB+	2x0.50 + 8x0.22	6.8	53.0 122.0
SAC02501022IDSNB+	2x0.50 + 10x0.22	6.9	53.0 122.0
SAC02501222IDSNB+	2x0.50 + 12x0.22	7.0	53.0 122.0
SAC02750222IDSNB+	2x0.75 + 2x0.22	5.8	36.0 122.0
SAC02750422IDSNB+	2x0.75 + 4x0.22	6.2	36.0 122.0
SAC02750622IDSNB+	2x0.75 + 6x0.22	6.4	36.0 122.0
SAC02750822IDSNB+	2x0.75 + 8x0.22	7.1	36.0 122.0
SAC02751022IDSNB+	2x0.75 + 10x0.22	7.2	36.0 122.0
SAC02751222IDSNB+	2x0.75 + 12x0.22	7.3	36.0 122.0

CABLES FOR CIVIL AND INDUSTRIAL SAFETY PLANTS

Standard Version

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0222GCRYKA+	2x0.22	3.2	122.0
SAS0422GCRYKA+	4x0.22	3.6	122.0
SAS0622GCRYKA+	6x0.22	4.1	122.0
SAS0822GCRYKA+	8x0.22	4.5	122.0
SAS1022GCRYKA+	10x0.22	5.2	122.0
SAS1222GCRYKA+	12x0.22	5.3	122.0
SAC02500222GCRYKB+	2x0.50 + 2x0.22	4.0	53.0 122.0
SAC02500422GCRYKB+	2x0.50 + 4x0.22	4.5	53.0 122.0
SAC02500622GCRYKB+	2x0.50 + 6x0.22	4.8	53.0 122.0
SAC02500822GCRYKB+	2x0.50 + 8x0.22	5.4	53.0 122.0
SAC02501022GCRYKB+	2x0.50 + 10x0.22	5.5	53.0 122.0
SAC02501222GCRYKB+	2x0.50 + 12x0.22	5.7	53.0 122.0
SAC02750222GCRYKB+	2x0.75 + 2x0.22	4.6	36.0 122.0
SAC02750422GCRYKB+	2x0.75 + 4x0.22	4.9	36.0 122.0
SAC02750622GCRYKB+	2x0.75 + 6x0.22	5.3	36.0 122.0
SAC02750822GCRYKB+	2x0.75 + 8x0.22	6.2	36.0 122.0
SAC02751022GCRYKB+	2x0.75 + 10x0.22	6.3	36.0 122.0
SAC02751222GCRYKB+	2x0.75 + 12x0.22	6.5	36.0 122.0

ALARM CABLE

Standard Version for external use LSZH

CABLES FOR CIVIL AND INDUSTRIAL SAFETY PLANTS

Standard Version for external use

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0222IDYKA+	2x0.22	4.4	122.0
SAS0422IDYKA+	4x0.22	4.8	122.0
SAS0622IDYKA+	6x0.22	5.4	122.0
SAS0822IDYKA+	8x0.22	5.8	122.0
SAS1022IDYKA+	10x0.22	6.4	122.0
SAS1222IDYKA+	12x0.22	5.2	122.0
SAC02500222IDYKB+	2x0.50 + 2x0.22	5.2	53.0 122.0
SAC02500422IDYKB+	2x0.50 + 4x0.22	5.7	53.0 122.0
SAC02500622IDYKB+	2x0.50 + 6x0.22	6.0	53.0 122.0
SAC02500822IDYKB+	2x0.50 + 8x0.22	6.8	53.0 122.0
SAC02501022IDYKB+	2x0.50 + 10x0.22	6.9	53.0 122.0
SAC02501222IDYKB+	2x0.50 + 12x0.22	7.1	53.0 122.0
SAC02750222IDYKB+	2x0.75 + 2x0.22	5.9	36.0 122.0
SAC02750422IDYKB+	2x0.75 + 4x0.22	6.3	36.0 122.0
SAC02750622IDYKB+	2x0.75 + 6x0.22	6.7	36.0 122.0
SAC02750822IDYKB+	2x0.75 + 8x0.22	7.6	36.0 122.0
SAC02751022IDYKB+	2x0.75 + 10x0.22	7.7	36.0 122.0
SAC02751222IDYKB+	2x0.75 + 12x0.22	8.1	36.0 122.0

CONTROL CABLE

LiYY

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



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Outer Sheath:

Polyvinyl chloride Flame Retardant - PVC FR

Colour Outer Sheath:

Grey RAL 7001

STANDARD REFERENCES

- VDE 0812

- IEC 60332-1

- IEC 60332-3-24

CPR CLASSIFICATION

EN 50575:2016 - B2_{CA} s2, d0, a3*

*Available also in EN 50575:2016 - C_{CA} s2, d0, a3

IDENTIFICATION OF CORES

- In according to DIN VDE 47100

- **OZ:** Black Numbered

- **JZ:** Black Numbered + Green/Yellow

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO - LiYY 2x0.14 mm² - 450/750V - VDE 0812 - IEC 60332-3 - 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

From 0,14 mm² to 0,75 mm²: 300/500 V

From 1,00 mm² to 4,00 mm²: 450/750 V

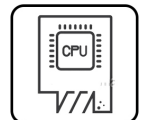
CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



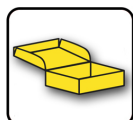
Control Cable



European Market



PACKAGE:



ON REQUEST

Personalized colour code and outer sheath



CONTROL CABLE

LiYY

From 0,14 mm² to 4,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SSS0214HBSAC	2x0.14	3.3	154.0
SSS0414HBSAC	4x0.14	3.6	154.0
SSS0814HBSAC	8x0.14	4.5	154.0
SSS1014HBSAC	10x0.14	5.3	154.0
SSS0226HBSAC	2x0.25	3.8	83.1
SSS0426HBSAC	4x0.25	4.1	83.1
SSS0826HBSAC	8x0.25	5.4	83.1
SSS1026HBSAC	10x0.25	6.4	83.1
SSS0234HBSAC	2x0.34	3.9	57.2
SSS0434HBSAC	4x0.34	4.3	57.2
SSS0834HBSAC	8x0.34	5.7	57.2
SSS1034HBSAC	10x0.34	6.6	57.2
SSS0250HBSAC	2x0.50	4.5	40.6
SSS0450HBSAC	4x0.50	5.0	40.6
SSS0850HBSAC	8x0.50	6.9	40.6
SSS1050HBSAC	10x0.50	7.8	40.6
SSS0275HBSAC	2x0.75	4.9	27.1
SSS0475HBSAC	4x0.75	5.6	27.1
SSS0875HBSAC	8x0.75	7.5	27.1
SSS1075HBSAC	10x0.75	9.0	27.1
SSS0210HBSAC	2x1.00	5.5	20.3
SSS0410HBSAC	4x1.00	6.3	20.3
SSS0810HBSAC	8x1.00	8.6	20.3
SSS1010HBSAC	10x1.00	9.8	20.3
SSS0215HBSAC	2x1.50	6.5	13.8
SSS0415HBSAC	4x1.50	7.2	13.8
SSS0815HBSAC	8x1.50	9.8	13.8
SSS1015HBSAC	10x1.50	11.6	13.8
SSS0225HBSAC	2x2.50	7.7	8.3
SSS0425HBSAC	4x2.50	9.0	8.3
SSS0825HBSAC	8x2.50	12.5	8.3
SSS1025HBSAC	10x2.50	14.4	8.3
SSS0240HBSAC	2x4.00	9.4	5.1
SSS0440HBSAC	4x4.00	10.8	5.1
SSS0840HBSAC	8x4.00	14.5	5.1
SSS1040HBSAC	10x4.00	16.7	5.1

CONTROL CABLE

FROR

Suitable for connection of movable equipment or for fixed laying in areas with risk of fire.

To be used in dry or wet interiors and for occasional or temporary use outdoor. Not allowed for laying underground even if protected.



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey RAL 7032

STANDARD REFERENCES

- EN 50414
- CEI EN 60332-1-2
- CEI 20-22 II
- CEI EN 50267-2

IDENTIFICATION OF CORES

In according to HD 308

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO - FROR 2x0.14 mm² - 450/750V - VDE 0812 - IEC 60332-3 - EN 50575: 2014+A1:2016 CPR Class Eca + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

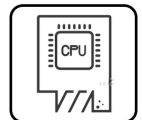
From 0,14 mm² to 0,75 mm²: 300/500 V

From 1,00 mm² to 4,00 mm²: 450/750 V

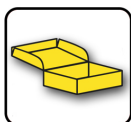
CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Control Cable****Italian Market**

PACKAGE:



ON REQUEST

Personalized colour code and outer sheath



CONTROL CABLE

FROR

From 0,14 mm² to 4,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SSS0214HAAAL	2x0.14	3.3	154.0
SSS0414HAAAG	4x0.14	3.6	154.0
SSS0814HAAAD	6x0.14	4.5	154.0
SSS1014HAAAD	10x0.14	5.3	154.0
SSS0226HAAAL	2x0.25	3.8	83.1
SSS0426HAAAG	4x0.25	4.1	83.1
SSS0826HAAAD	6x0.25	5.4	83.1
SSS1026HAAAD	10x0.25	6.4	83.1
SSS0234HAAAL	2x0.34	3.9	57.2
SSS0434HAAAG	4x0.34	4.3	57.2
SSS0834HAAAD	6x0.34	5.7	57.2
SSS1034HAAAD	10x0.34	6.6	57.2
SSS0250HAAAL	2x0.50	4.5	40.6
SSS0450HAAAG	4x0.50	5.0	40.6
SSS0850HAAAD	6x0.50	6.9	40.6
SSS1050HAAAD	10x0.50	7.8	40.6
SSS0275HAAAL	2x0.75	4.9	27.1
SSS0475HAAAG	4x0.75	5.6	27.1
SSS0875HAAAD	6x0.75	7.5	27.1
SSS1075HAAAD	10x0.75	9.0	27.1
SSS0210HAAAL	2x1.00	5.5	20.3
SSS0410HAAAG	4x1.00	6.3	20.3
SSS0810HAAAD	6x1.00	8.6	20.3
SSS1010HAAAD	10x1.00	9.8	20.3
SSS0215HAAAL	2x1.50	6.5	13.8
SSS0415HAAAG	4x1.50	7.2	13.8
SSS0815HAAAD	6x1.50	9.8	13.8
SSS1015HAAAD	10x1.50	11.6	13.8
SSS0225HAAAL	2x2.50	7.7	8.3
SSS0425HAAAG	4x2.50	9.0	8.3
SSS0825HAAAD	6x2.50	12.5	8.3
SSS1025HAAAD	10x2.50	14.4	8.3
SSS0240HAAAL	2x4.00	9.4	5.1
SSS0440HAAAG	4x4.00	10.8	5.1
SSS0840HAAAD	6x4.00	14.5	5.1
SSS1040HAAAD	10x4.00	16.7	5.1

CONTROL CABLE

FROR16

Suitable for connection of movable equipment or for fixed laying in areas with risk of fire.

To be used in dry or wet interiors and for occasional or temporary use outdoor. Not allowed for laying underground even if protected.



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Outer Sheath:

Polyvinyl chloride Flame Retardant - PVC FR

Colour Outer Sheath:

Grey RAL 7032

STANDARD REFERENCES

- EN 50414
- CEI EN 60332-1-2
- CEI 20-22 II
- CEI EN 50267-2

IDENTIFICATION OF CORES

In according to HD 308

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s2, d0, a3

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO - FROR16 2x0.14 mm² - 450/750V - VDE 0812 - IEC 60332-3 - EN 50575: 2014+A1:2016 CPR Class Cca + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

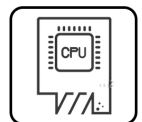
From 0,14 mm² to 0,75 mm²: 300/500 V

From 1,00 mm² to 4,00 mm²: 450/750 V

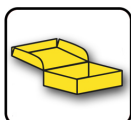
CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Control Cable****Italian Market**

PACKAGE:



ON REQUEST

Personalized colour code and outer sheath



CONTROL CABLE

FROR16

From 0,14 mm² to 4,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SSS0214HASAL-CPRC	2x0.14	3.3	154.0
SSS0414HASAG-CPRC	4x0.14	3.6	154.0
SSS0814HASAD-CPRC	6x0.14	4.5	154.0
SSS1014HASAD-CPRC	10x0.14	5.3	154.0
SSS0226HASAL-CPRC	2x0.25	3.8	83.1
SSS0426HASAG-CPRC	4x0.25	4.1	83.1
SSS0826HASAD-CPRC	6x0.25	5.4	83.1
SSS1026HASAD-CPRC	10x0.25	6.4	83.1
SSS0234HASAL-CPRC	2x0.34	3.9	57.2
SSS0434HASAG-CPRC	4x0.34	4.3	57.2
SSS0834HASAD-CPRC	6x0.34	5.7	57.2
SSS1034HASAD-CPRC	10x0.34	6.6	57.2
SSS0250HASAL-CPRC	2x0.50	4.5	40.6
SSS0450HASAG-CPRC	4x0.50	5.0	40.6
SSS0850HASAD-CPRC	6x0.50	6.9	40.6
SSS1050HASAD-CPRC	10x0.50	7.8	40.6
SSS0275HASAL-CPRC	2x0.75	4.9	27.1
SSS0475HASAG-CPRC	4x0.75	5.6	27.1
SSS0875HASAD-CPRC	6x0.75	7.5	27.1
SSS1075HASAD-CPRC	10x0.75	9.0	27.1
SSS0210HASAL-CPRC	2x1.00	5.5	20.3
SSS0410HASAG-CPRC	4x1.00	6.3	20.3
SSS0810HASAD-CPRC	6x1.00	8.6	20.3
SSS1010HASAD-CPRC	10x1.00	9.8	20.3
SSS0215HASAL-CPRC	2x1.50	6.5	13.8
SSS0415HASAG-CPRC	4x1.50	7.2	13.8
SSS0815HASAD-CPRC	6x1.50	9.8	13.8
SSS1015HASAD-CPRC	10x1.50	11.6	13.8
SSS0225HASAL-CPRC	2x2.50	7.7	8.3
SSS0425HASAG-CPRC	4x2.50	9.0	8.3
SSS0825HASAD-CPRC	6x2.50	12.5	8.3
SSS1025HASAD-CPRC	10x2.50	14.4	8.3
SSS0240HASAL-CPRC	2x4.00	9.4	5.1
SSS0440HASAG-CPRC	4x4.00	10.8	5.1
SSS0840HASAD-CPRC	6x4.00	14.5	5.1
SSS1040HASAD-CPRC	10x4.00	16.7	5.1

CONTROL CABLE

FROR16

Suitable for connection of movable equipment or for fixed laying in areas with risk of fire.

To be used in dry or wet interiors and for occasional or temporary use outdoor. Not allowed for laying underground even if protected.



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Outer Sheath:

Polyvinyl chloride Flame Retardant - PVC FR

Colour Outer Sheath:

Grey RAL 7032

STANDARD REFERENCES

- EN 50414
- CEI EN 60332-1-2
- CEI 20-22 II
- CEI EN 50267-2

IDENTIFICATION OF CORES

In according to HD 308

CPR CLASSIFICATION

EN 50575:2016 - B_{2CA} s2, d0, a3

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO - FROR16 2x0.14 mm² - 450/750V - VDE 0812 - IEC 60332-3 - 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

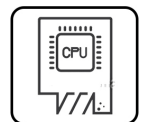
From 0,14 mm² to 0,75 mm²: 300/500 V

From 1,00 mm² to 4,00 mm²: 450/750 V

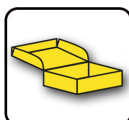
CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Control Cable****Italian Market**

PACKAGE:



ON REQUEST

Personalized colour code and outer sheath



CONTROL CABLE

FROR16

From 0,14 mm² to 4,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SSS0214HASAL	2x0.14	3.3	154.0
SSS0414HASAG	4x0.14	3.6	154.0
SSS0814HASAD	6x0.14	4.5	154.0
SSS1014HASAD	10x0.14	5.3	154.0
SSS0226HASAL	2x0.25	3.8	83.1
SSS0426HASAG	4x0.25	4.1	83.1
SSS0826HASAD	6x0.25	5.4	83.1
SSS1026HASAD	10x0.25	6.4	83.1
SSS0234HASAL	2x0.34	3.9	57.2
SSS0434HASAG	4x0.34	4.3	57.2
SSS0834HASAD	6x0.34	5.7	57.2
SSS1034HASAD	10x0.34	6.6	57.2
SSS0250HASAL	2x0.50	4.5	40.6
SSS0450HASAG	4x0.50	5.0	40.6
SSS0850HASAD	6x0.50	6.9	40.6
SSS1050HASAD	10x0.50	7.8	40.6
SSS0275HASAL	2x0.75	4.9	27.1
SSS0475HASAG	4x0.75	5.6	27.1
SSS0875HASAD	6x0.75	7.5	27.1
SSS1075HASAD	10x0.75	9.0	27.1
SSS0210HASAL	2x1.00	5.5	20.3
SSS0410HASAG	4x1.00	6.3	20.3
SSS0810HASAD	6x1.00	8.6	20.3
SSS1010HASAD	10x1.00	9.8	20.3
SSS0215HASAL	2x1.50	6.5	13.8
SSS0415HASAG	4x1.50	7.2	13.8
SSS0815HASAD	6x1.50	9.8	13.8
SSS1015HASAD	10x1.50	11.6	13.8
SSS0225HASAL	2x2.50	7.7	8.3
SSS0425HASAG	4x2.50	9.0	8.3
SSS0825HASAD	6x2.50	12.5	8.3
SSS1025HASAD	10x2.50	14.4	8.3
SSS0240HASAL	2x4.00	9.4	5.1
SSS0440HASAG	4x4.00	10.8	5.1
SSS0840HASAD	6x4.00	14.5	5.1
SSS1040HASAD	10x4.00	16.7	5.1

CONTROL CABLE

LiYCY

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



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

Tinned Copper Wire Braid

Outer Sheath:

Polyvinyl chloride Flame Retardant - PVC FR

Colour Outer Sheath:

Grey RAL 7001

STANDARD REFERENCES

- VDE 0812

- IEC 60332-1

- IEC 60332-3-24

CPR CLASSIFICATION

EN 50575:2016 - B_{2CA} s₂, d₀, a₃*

*Available also in EN 50575:2016 - C_{CA} s₂, d₀, a₃

IDENTIFICATION OF CORES

- In according to DIN VDE 47100

- **OZ:** Black Numbered

- **JZ:** Black Numbered + Green/Yellow

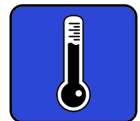
TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO - LiYCY 2x0,14 mm² - 300/500V - VDE 0812 - IEC 60332-3 - 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

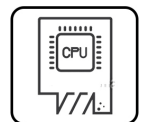
From 0,14 mm² to 0,75 mm²: 300/500 V

From 1,00 mm² to 4,00 mm²: 450/750 V

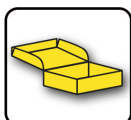
CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Control Cable****European Market**

PACKAGE:



ON REQUEST

Personalized colour code and outer sheath



CONTROL CABLE

LiYCY

From 0,14 mm² to 4,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
STS0214HBAAC	2x0.14	3.7	154.0
STS0414HBAAC	4x0.14	4.0	154.0
STS0814HBAAC	6x0.14	4.5	154.0
STS1014HBAAC	10x0.14	5.7	154.0
STS0226HBAAC	2x0.25	4.2	83.1
STS0426HBAAC	4x0.25	4.5	83.1
STS0826HBAAC	6x0.25	5.4	83.1
STS1026HBAAC	10x0.25	6.8	83.1
STS0226HBAAC	2x0.34	4.3	57.2
STS0426HBAAC	4x0.34	4.7	57.2
STS0826HBAAC	6x0.34	5.6	57.2
STS1026HBAAC	10x0.34	7.0	57.2
STS0250HBAAC	2x0.50	4.9	40.6
STS0450HBAAC	4x0.50	5.6	40.6
STS0850HBAAC	6x0.50	6.7	40.6
STS1050HBAAC	10x0.50	8.6	40.6
STS0275HBAAC	2x0.75	5.5	27.1
STS0475HBAAC	4x0.75	6.0	27.1
STS0875HBAAC	6x0.75	7.3	27.1
STS1075HBAAC	10x0.75	9.4	27.1
STS0210HBAAC	2x1.00	5.9	20.3
STS0410HBAAC	4x1.00	6.7	20.3
STS0810HBAAC	6x1.00	7.9	20.3
STS1010HBAAC	10x1.00	10.6	20.3
STS0215HBAAC	2x1.50	6.9	13.8
STS0415HBAAC	4x1.50	7.6	13.8
STS0815HBAAC	6x1.50	9.3	13.8
STS1015HBAAC	10x1.50	12.0	13.8
STS0225HBAAC	2x2.50	6.9	8.3
STS0425HBAAC	4x2.50	9.4	8.3
STS0825HBAAC	6x2.50	11.5	8.3
STS1025HBAAC	10x2.50	14.8	8.3
STS0240HBAAC	2x4.00	9.8	5.1
STS0440HBAAC	4x4.00	11.2	5.1
STS0840HBAAC	6x4.00	13.7	5.1
STS1040HBAAC	10x4.00	17.1	5.1

CONTROL CABLE

FROHR2

Suitable for connection of movable equipment or for fixed laying in areas with risk of fire.
To be used in dry or wet interiors and for occasional or temporary use outdoor. Not allowed for laying underground even if protected.



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

Tinned Copper Wire Braid

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey RAL 7032

STANDARD REFERENCES

- EN 50414
- CEI EN 60332-1-2
- CEI 20-22 II
- CEI EN 50267-2

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

IDENTIFICATION OF CORES

In according to HD 308

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO - FR20H2R 2x0,14 mm² - 300/500V - VDE 0812 - IEC 60332-3 - EN 50575: 2014+A1:2016
CPR Class Eca + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

From 0,14 mm² to 0,75 mm²: 300/500 V

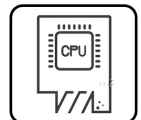
From 1,00 mm² to 4,00 mm²: 450/750 V

CHARACTERISTICS

Min. Bending Radius
8 x cable diameter



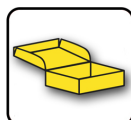
Control Cable



Italian Market



PACKAGE:



ON REQUEST

Armour in steel wire braid -
Personalized colour code and outer sheath -



CONTROL CABLE

FROHR2

From 0,14 mm² to 4,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
FR60214HAAAL	2x0.14	3.7	154.0
FR60414HAAAG	4x0.14	4.0	154.0
FR60814HAAAD	6x0.14	4.5	154.0
FR61014HAAAD	10x0.14	5.7	154.0
FR60226HAAAL	2x0.25	4.2	83.1
FR60426HAAAG	4x0.25	4.5	83.1
FR60826HAAAD	6x0.25	5.4	83.1
FR61026HAAAD	10x0.25	6.8	83.1
FR60234HAAAL	2x0.34	4.3	57.2
FR60434HAAAG	4x0.34	4.7	57.2
FR60834HAAAD	6x0.34	5.6	57.2
FR61034HAAAD	10x0.34	7.0	57.2
FR60250HAAAL	2x0.50	4.9	40.6
FR60450HAAAG	4x0.50	5.6	40.6
FR60850HAAAD	6x0.50	6.7	40.6
FR61050HAAAD	10x0.50	8.6	40.6
FR60275HAAAL	2x0.75	5.5	27.1
FR60475HAAAG	4x0.75	6.0	27.1
FR60875HAAAD	6x0.75	7.3	27.1
FR61075HAAAD	6x0.75	9.4	27.1
FR60210HAAAL	2x1.00	5.9	20.3
FR60410HAAAG	4x1.00	6.7	20.3
FR60810HAAAD	6x1.00	7.9	20.3
FR61010HAAAD	10x1.00	10.6	20.3
FR60215HAAAL	2x1.50	6.9	13.8
FR60415HAAAG	4x1.50	7.6	13.8
FR60815HAAAD	6x1.50	9.3	13.8
FR61015HAAAD	10x1.50	12.0	13.8
FR60225HAAAL	2x2.50	6.9	8.3
FR60425HAAAG	4x2.50	9.4	8.3
FR60825HAAAD	6x2.50	11.5	8.3
FR61025HAAAD	10x2.50	14.8	8.3
FR60240HAAAL	2x4.00	9.8	5.1
FR60440HAAAG	4x4.00	11.2	5.1
FR60840HAAAD	6x4.00	13.7	5.1
FR61040HAAAD	10x4.00	17.1	5.1

CONTROL CABLE

FROH2R16

Suitable for connection of movable equipment or for fixed laying in areas with risk of fire.

To be used in dry or wet interiors and for occasional or temporary use outdoor. Not allowed for laying underground even if protected.



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

Tinned Copper Wire Braid

Outer Sheath:

Polyvinyl chloride Flame Retardant - PVC FR

Colour Outer Sheath:

Grey RAL 7032

STANDARD REFERENCES

- EN 50414
- CEI EN 60332-1-2
- CEI 20-22 II
- CEI EN 50267-2

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1, d0, a3

IDENTIFICATION OF CORES

In according to HD 308

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO - FROH2R16 2x0,14 mm² - 300/500V - VDE 0812 - IEC 60332-3 - EN 50575: 2014+A1:2016
CPR Class Cca + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

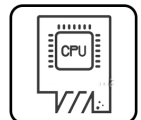
From 0,14 mm² to 0,75 mm²: 300/500 V

From 1,00 mm² to 4,00 mm²: 450/750 V

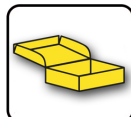
CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Control Cable****Italian Market**

PACKAGE:



ON REQUEST

Armour in steel wire braid -
Personalized colour code and outer sheath -



CONTROL CABLE

FROH2R16

From 0,14 mm² to 4,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
FR60214HASAL-CPRC	2x0.14	3.7	154.0
FR60414HASAG-CPRC	4x0.14	4.0	154.0
FR60814HASAD-CPRC	6x0.14	4.5	154.0
FR61014HASAD-CPRC	10x0.14	5.7	154.0
FR60226HASAL-CPRC	2x0.25	4.2	83.1
FR60426HASAG-CPRC	4x0.25	4.5	83.1
FR60826HASAD-CPRC	6x0.25	5.4	83.1
FR61026HASAD-CPRC	10x0.25	6.8	83.1
FR60234HASAL-CPRC	2x0.34	4.3	57.2
FR60434HASAG-CPRC	4x0.34	4.7	57.2
FR60834HASAD-CPRC	6x0.34	5.6	57.2
FR61034HASAD-CPRC	10x0.34	7.0	57.2
FR60250HASAL-CPRC	2x0.50	4.9	40.6
FR60450HASAG-CPRC	4x0.50	5.6	40.6
FR60850HASAD-CPRC	6x0.50	6.7	40.6
FR61050HASAD-CPRC	10x0.50	8.6	40.6
FR60275HASAL-CPRC	2x0.75	5.5	27.1
FR60475HASAG-CPRC	4x0.75	6.0	27.1
FR60875HASAD-CPRC	6x0.75	7.3	27.1
FR61075HASAD-CPRC	10x0.75	9.4	27.1
FR60210HASAL-CPRC	2x1.00	5.9	20.3
FR60410HASAG-CPRC	4x1.00	6.7	20.3
FR60810HASAD-CPRC	6x1.00	7.9	20.3
FR61010HASAD-CPRC	10x1.00	10.6	20.3
FR60215HASAL-CPRC	2x1.50	6.9	13.8
FR60415HASAG-CPRC	4x1.50	7.6	13.8
FR60815HASAD-CPRC	6x1.50	9.3	13.8
FR61015HASAD-CPRC	10x1.50	12.0	13.8
FR60225HASAL-CPRC	2x2.50	6.9	8.3
FR60425HASAG-CPRC	4x2.50	9.4	8.3
FR60825HASAD-CPRC	6x2.50	11.5	8.3
FR61025HASAD-CPRC	10x2.50	14.8	8.3
FR60240HASAL-CPRC	2x4.00	9.8	5.1
FR60440HASAG-CPRC	4x4.00	11.2	5.1
FR60840HASAD-CPRC	6x4.00	13.7	5.1
FR61040HASAD-CPRC	10x4.00	17.1	5.1

CONTROL CABLE

FROH2R16

Suitable for connection of movable equipment or for fixed laying in areas with risk of fire.

To be used in dry or wet interiors and for occasional or temporary use outdoor. Not allowed for laying underground even if protected.



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

Tinned Copper Wire Braid

Outer Sheath:

Polyvinyl chloride Flame Retardant - PVC FR

Colour Outer Sheath:

Grey RAL 7032

STANDARD REFERENCES

- EN 50414
- CEI EN 60332-1-2
- CEI 20-22 II
- CEI EN 50267-2

CPR CLASSIFICATION

EN 50575:2016 - B_{2ca} s1, d0, a3

IDENTIFICATION OF CORES

In according to HD 308

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO - FROH2R16 2x0,14 mm² - 300/500V - VDE 0812 - IEC 60332-3 - 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

From 0,14 mm² to 0,75 mm²: 300/500 V

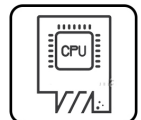
From 1,00 mm² to 4,00 mm²: 450/750 V

CHARACTERISTICS

Min. Bending Radius
8 x cable diameter



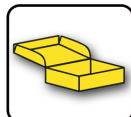
Control Cable



Italian Market



PACKAGE:



ON REQUEST

Armour in steel wire braid -
Personalized colour code and outer sheath -



CONTROL CABLE

FROH2R16

From 0,14 mm² to 4,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
FR60214HASAL	2x0.14	3.7	154.0
FR60414HASAG	4x0.14	4.0	154.0
FR60814HASAD	6x0.14	4.5	154.0
FR61014HASAD	10x0.14	5.7	154.0
FR60226HASAL	2x0.25	4.2	83.1
FR60426HASAG	4x0.25	4.5	83.1
FR60826HASAD	6x0.25	5.4	83.1
FR61026HASAD	10x0.25	6.8	83.1
FR60234HASAL	2x0.34	4.3	57.2
FR60434HASAG	4x0.34	4.7	57.2
FR60834HASAD	6x0.34	5.6	57.2
FR61034HASAD	10x0.34	7.0	57.2
FR60250HASAL	2x0.50	4.9	40.6
FR60450HASAG	4x0.50	5.6	40.6
FR60850HASAD	6x0.50	6.7	40.6
FR61050HASAD	10x0.50	8.6	40.6
FR60275HASAL	2x0.75	5.5	27.1
FR60475HASAG	4x0.75	6.0	27.1
FR60875HASAD	6x0.75	7.3	27.1
FR61075HASAD	10x0.75	9.4	27.1
FR60210HASAL	2x1.00	5.9	20.3
FR60410HASAG	4x1.00	6.7	20.3
FR60810HASAD	6x1.00	7.9	20.3
FR61010HASAD	10x1.00	10.6	20.3
FR60215HASAL	2x1.50	6.9	13.8
FR60415HASAG	4x1.50	7.6	13.8
FR60815HASAD	6x1.50	9.3	13.8
FR61015HASAD	10x1.50	12.0	13.8
FR60225HASAL	2x2.50	6.9	8.3
FR60425HASAG	4x2.50	9.4	8.3
FR60825HASAD	6x2.50	11.5	8.3
FR61025HASAD	10x2.50	14.8	8.3
FR60240HASAL	2x4.00	9.8	5.1
FR60440HASAG	4x4.00	11.2	5.1
FR60840HASAD	6x4.00	13.7	5.1
FR61040HASAD	10x4.00	17.1	5.1

CONTROL CABLE

FROHH2R

Suitable for connection of movable equipment or for fixed laying in areas with risk of fire.

To be used in dry or wet interiors and for occasional or temporary use outdoor. Not allowed for laying underground even if protected.



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

Aluminium / PETP + Tinned Copper Braid

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey RAL 7032

STANDARD REFERENCES

- EN 50414
- CEI EN 60332-1-2
- CEI 20-22 II
- CEI EN 50267-2

CPR CLASSIFICATION

EN 50575:2016 - E_{CA} s1, d0, a3

IDENTIFICATION OF CORES

In according to HD 308

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO - FR20HH2R 2x0,14 mm² - 300/500V - VDE 0812 - IEC 60332-3 - 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

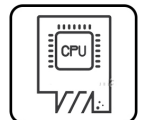
From 0,14 mm² to 0,75 mm²: 300/500 V

From 1,00 mm² to 6,00 mm²: 450/750 V

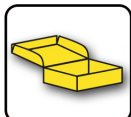
CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Control Cable****Italian Market**

PACKAGE:



ON REQUEST

Armour in steel wire braid -
Personalized colour code and outer sheath -



CONTROL CABLE

FROHH2R

From 0,50 mm² to 6,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SMS0250HAAAL	2x0.50	5.0	40.6
SMS0350HAAAG	3x0.50	5.5	40.6
SMS0450HAAAF	4x0.50	5.9	40.6
SMS0550HAAAT	5x0.50	6.5	40.6
SMS0650HAAAD	6x0.50	7.0	40.6
SMS0275HAAAL	2x0.75	5.6	27.1
SMS0375HAAAG	3x0.75	5.9	27.1
SMS0475HAAAF	4x0.75	6.6	27.1
SMS0575HAAAT	5x0.75	7.1	27.1
SMS0675HAAAD	6x0.75	7.6	27.1
SMS0210HAAAL	2x1.00	6.0	20.3
SMS0310HAAAG	3x1.00	6.5	20.3
SMS0410HAAAF	4x1.00	7.0	20.3
SMS0510HAAAT	5x1.00	7.6	20.3
SMS0610HAAAD	6x1.00	8.6	20.3
SMS0215HAAAL	2x1.50	7.0	13.8
SMS0315HAAAG	3x1.50	7.3	13.8
SMS0415HAAAF	4x1.50	8.0	13.8
SMS0515HAAAT	5x1.50	9.0	13.8
SMS0615HAAAD	6x1.50	9.8	13.8
SMS0250HAAAL	2x2.50	8.6	8.3
SMS0350HAAAG	3x2.50	9.1	8.3
SMS0450HAAAF	4x2.50	9.9	8.3
SMS0550HAAAT	5x2.50	11.1	8.3
SMS0650HAAAD	6x2.50	12.0	8.3
SMS0250HAAAL	2x4.00	9.9	5.1
SMS0350HAAAG	3x4.00	10.8	5.1
SMS0450HAAAF	4x4.00	11.8	5.1
SMS0550HAAAT	5x4.00	13.2	5.1
SMS0650HAAAD	6x4.00	14.3	5.1
SMS0250HAAAL	2x6.00	11,8	3.4
SMS0350HAAAG	3x6.00	12.9	3.4
SMS0450HAAAF	4x6.00	14.0	3.4
SMS0550HAAAT	5x6.00	15.3	3.4
SMS0650HAAAD	6x6.00	16.6	3.4

CONTROL CABLE

FROHH2R16

Suitable for connection of movable equipment or for fixed laying in areas with risk of fire.
To be used in dry or wet interiors and for occasional or temporary use outdoor. Not allowed for laying underground even if protected.



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

Aluminium / PETP + Tinned Copper Braid

Outer Sheath:

Polyvinyl chloride Flame Retardant - PVC FR

Colour Outer Sheath:

Grey RAL 7032

STANDARD REFERENCES

- EN 50414
- CEI EN 60332-1-2
- CEI 20-22 II
- CEI EN 50267-2

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1, d0, a3

IDENTIFICATION OF CORES

In according to HD 308

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO - FROHH2R16 2x0,14 mm² - 300/500V - VDE 0812 - IEC 60332-3 - 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

From 0,14 mm² to 0,75 mm²: 300/500 V

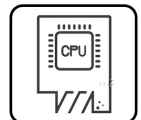
From 1,00 mm² to 6,00 mm²: 450/750 V

CHARACTERISTICS

Min. Bending Radius
8 x cable diameter



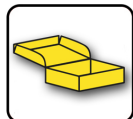
Control Cable



Italian Market



PACKAGE:



ON REQUEST

Armour in steel wire braid -
Personalized colour code and outer sheath -



CONTROL CABLE

FROHH2R16

From 0,50 mm² to 6,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SMS0250HASAL-CPRC	2x0.50	5.0	40.6
SMS0350HASAG-CPRC	3x0.50	5.5	40.6
SMS0450HASAF-CPRC	4x0.50	5.9	40.6
SMS0550HASAT-CPRC	5x0.50	6.5	40.6
SMS0650HASAD-CPRC	6x0.50	7.0	40.6
SMS0250HASAL-CPRC	2x0.75	5.6	27.1
SMS0350HASAG-CPRC	3x0.75	5.9	27.1
SMS0450HASAF-CPRC	4x0.75	6.6	27.1
SMS0550HASAT-CPRC	5x0.75	7.1	27.1
SMS0650HASAD-CPRC	6x0.75	7.6	27.1
SMS0250HASAL-CPRC	2x1.00	6.0	20.3
SMS0350HASAG-CPRC	3x1.00	6.5	20.3
SMS0450HASAF-CPRC	4x1.00	7.0	20.3
SMS0550HASAT-CPRC	5x1.00	7.6	20.3
SMS0650HASAD-CPRC	6x1.00	8.6	20.3
SMS0250HASAL-CPRC	2x1.50	7.0	13.8
SMS0350HASAG-CPRC	3x1.50	7.3	13.8
SMS0450HASAF-CPRC	4x1.50	8.0	13.8
SMS0550HASAT-CPRC	5x1.50	9.0	13.8
SMS0650HASAD-CPRC	6x1.50	9.8	13.8
SMS0250HASAL-CPRC	2x2.50	8.6	8.3
SMS0350HASAG-CPRC	3x2.50	9.1	8.3
SMS0450HASAF-CPRC	4x2.50	9.9	8.3
SMS0550HASAT-CPRC	5x2.50	11.1	8.3
SMS0650HASAD-CPRC	6x2.50	12.0	8.3
SMS0250HASAL-CPRC	2x4.00	9.9	5.1
SMS0350HASAG-CPRC	3x4.00	10.8	5.1
SMS0450HASAF-CPRC	4x4.00	11.8	5.1
SMS0550HASAT-CPRC	5x4.00	13.2	5.1
SMS0650HASAD-CPRC	6x4.00	14.3	5.1
SMS0250HASAL-CPRC	2x6.00	11,8	3.4
SMS0350HASAG-CPRC	3x6.00	12.9	3.4
SMS0450HASAF-CPRC	4x6.00	14.0	3.4
SMS0550HASAT-CPRC	5x6.00	15.3	3.4
SMS0650HASAD-CPRC	6x6.00	16.6	3.4

CONTROL CABLE

FROHH2R16

Suitable for connection of movable equipment or for fixed laying in areas with risk of fire.
To be used in dry or wet interiors and for occasional or temporary use outdoor. Not allowed for laying underground even if protected.



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Polyvinyl chloride - PVC

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

Aluminium / PETP + Tinned Copper Braid

Outer Sheath:

Polyvinyl chloride Flame Retardant - PVC FR

Colour Outer Sheath:

Grey RAL 7032

STANDARD REFERENCES

- EN 50414
- CEI EN 60332-1-2
- CEI 20-22 II
- CEI EN 50267-2

CPR CLASSIFICATION

EN 50575:2016 - B_{2ca} s1, d0, a3

IDENTIFICATION OF CORES

In according to HD 308

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO - FROHH2R16 2x0,14 mm² - 300/500V - VDE 0812 - IEC 60332-3 - 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

From 0,14 mm² to 0,75 mm²: 300/500 V

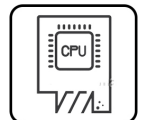
From 1,00 mm² to 6,00 mm²: 450/750 V

CHARACTERISTICS

Min. Bending Radius
8 x cable diameter



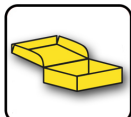
Control Cable



Italian Market



PACKAGE:



ON REQUEST

Armour in steel wire braid -
Personalized colour code and outer sheath -



CONTROL CABLE

FROHH2R16

From 0,50 mm² to 6,00 mm²

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
SMS0250HASAL	2x0.50	5.0	40.6
SMS0350HASAG	3x0.50	5.5	40.6
SMS0450HASAF	4x0.50	5.9	40.6
SMS0550HASAT	5x0.50	6.5	40.6
SMS0650HASAD	6x0.50	7.0	40.6
SMS0250HASAL	2x0.75	5.6	27.1
SMS0350HASAG	3x0.75	5.9	27.1
SMS0450HASAF	4x0.75	6.6	27.1
SMS0550HASAT	5x0.75	7.1	27.1
SMS0650HASAD	6x0.75	7.6	27.1
SMS0250HASAL	2x1.00	6.0	20.3
SMS0350HASAG	3x1.00	6.5	20.3
SMS0450HASAF	4x1.00	7.0	20.3
SMS0550HASAT	5x1.00	7.6	20.3
SMS0650HASAD	6x1.00	8.6	20.3
SMS0250HASAL	2x1.50	7.0	13.8
SMS0350HASAG	3x1.50	7.3	13.8
SMS0450HASAF	4x1.50	8.0	13.8
SMS0550HASAT	5x1.50	9.0	13.8
SMS0650HASAD	6x1.50	9.8	13.8
SMS0250HASAL	2x2.50	8.6	8.3
SMS0350HASAG	3x2.50	9.1	8.3
SMS0450HASAF	4x2.50	9.9	8.3
SMS0550HASAT	5x2.50	11.1	8.3
SMS0650HASAD	6x2.50	12.0	8.3
SMS0250HASAL	2x4.00	9.9	5.1
SMS0350HASAG	3x4.00	10.8	5.1
SMS0450HASAF	4x4.00	11.8	5.1
SMS0550HASAT	5x4.00	13.2	5.1
SMS0650HASAD	6x4.00	14.3	5.1
SMS0250HASAL	2x6.00	11,8	3.4
SMS0350HASAG	3x6.00	12.9	3.4
SMS0450HASAF	4x6.00	14.0	3.4
SMS0550HASAT	5x6.00	15.3	3.4
SMS0650HASAD	6x6.00	16.6	3.4

COAX CABLE

RG 58 C/U 50 Ω

Transmission of dat signals in applications such as antenna feed cables or Ethernet backbones



CONSTRUCTION

Conductor:

Tinned copper wire, multistrand

Dielectric:

Low density polyethylene - LDPE

Braid:

Tinned copper wire braid - Coverage: 90%

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Impedance:

50 Ohm

Capacitance:

100 pF/m

Velocity of Propagation:

66%

Operating Voltage:

300 V

CHARACTERISTICS

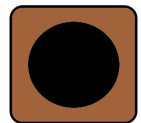
Coaxial Cable



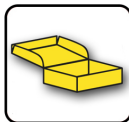
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



WARNING

These cables can be installed along with power cables marked 450/750 V or 0,6/1 kV operating with systems having maximum voltage to ground 400 V AC



COAX CABLE

RG 58 C/U 50 Ω

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
RG 58	4.9	38

FREQUENCY [MHz]	ATTENUATION [dB/100m]
50	12.6
100	18.1
200	26.5
400	32.5
800	53.4
1000	65.2

ELECTRICAL RESISTANCE AT 20°C	[Ω /km]
CONDUCTOR RESISTANCE	41.2

COAX CABLE

RG 174 U 50 Ω

Transmission of data signals in applications such as LAN/WAN or GPS



CONSTRUCTION

Conductor:

Bare copper wire

Dielectric:

Low density polyethylene - LDPE

Braid:

Tinned copper wire braid - Coverage: 90%

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Impedance:

50 Ohm

Capacitance:

101 pF/m

Velocity of Propagation:

66%

Operating Voltage:

300 V

CHARACTERISTICS

Coaxial Cable



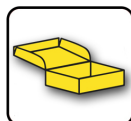
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



WARNING

These cables can be installed along with power cables marked 450/750 V or 0,6/1 kV operating with systems having maximum voltage to ground 400 V AC



COAX CABLE

RG 174 U 50 Ω

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
RG 174	2.8	15

FREQUENCY [MHz]	ATTENUATION [dB/100m]
50	20.0
100	25.8
200	42.5
400	54.9
800	82.9
1000	97.0

ELECTRICAL RESISTANCE AT 20°C	[Ω /km]
CONDUCTOR RESISTANCE	290.0

COAX CABLE

RG 213 U 50 Ω

Transmission of data signals in applications such as antenna feed cables in situations where low signal loss and high operating voltage performance is needed



CONSTRUCTION

Formation:

Bare copper wire, 7 strand

Insulation:

Low density polyethylene - LDPE

Braid:

Bare copper wire braid - Coverage: 90%

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

CPR CLASSIFICATION

EN 50575:2016 - E_{ca}

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Impedance:

50 Ohm

Capacitance:

100 pF/m

Velocity of Propagation:

66%

Operating Voltage:

300 V

CHARACTERISTICS

Coaxial Cable



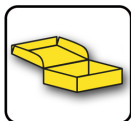
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



WARNING

These cables can be installed along with power cables marked 450/750 V or 0,6/1 kV operating with systems having maximum voltage to ground 400 V AC



COAX CABLE

RG 174 U 50 Ω

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
RG 213	10.3	151

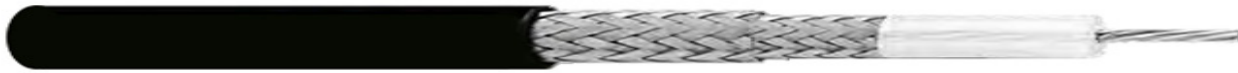
FREQUENCY [MHz]	ATTENUATION [dB/100m]
50	4.9
100	6.9
200	9.9
400	13.7
800	20.4
1000	24.9

ELECTRICAL RESISTANCE AT 20°C	[Ω /km]
CONDUCTOR RESISTANCE	5.8

COAX CABLE

RG 214 U 50 Ω

Standard Version



CONSTRUCTION

Formation:

Tinned Copper Wire, 7 Strand

Insulation:

Low density polyethylene - LDPE

1° Braid:

Bare copper wire braid - Coverage: 96%

2° Braid:

Bare copper wire braid - Coverage: 98%

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Impedance:

50 Ohm

Capacitance:

100 pF/m

Velocity of Propagation:

66%

Operating Voltage:

300 V

CHARACTERISTICS

Coaxial Cable



Min. Bending Radius

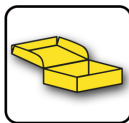
8 x cable diameter



Fixed Laying



PACKAGE:



WARNING

These cables can be installed along with power cables marked 450/750 V or 0,6/1 kV operating with systems having maximum voltage to ground 400 V AC



COAX CABLE

RG 214 U 50 Ω

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
RG 213	10.8	209

FREQUENCY [MHz]	ATTENUATION [dB/100m]
50	4.5
100	6.7
200	9.9
400	14.3
800	22.5
1000	26.0

ELECTRICAL RESISTANCE AT 20°C	[Ω/km]
CONDUCTOR RESISTANCE	6.0

COAX CABLE

RG 59 B/U 75 Ω

Transmission of a video or audio signal in applications such as security systems or CATV



CONSTRUCTION

Formation:

Plain annealed copper wire, solid

Insulation:

Polyethylene - PE

Braid:

Coverage: 88%

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Impedance:

75 Ohm

Capacitance:

66 pF/m

Velocity of Propagation:

66%

Operating Voltage:

300 V

CHARACTERISTICS

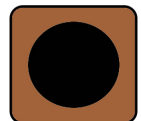
Coaxial Cable



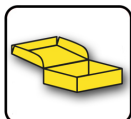
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



WARNING

These cables can be installed along with power cables marked 450/750 V or 0,6/1 kV operating with systems having maximum voltage to ground 400 V AC



COAX CABLE

RG 59 B/U 75 Ω

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
RG 59	6.1	55

FREQUENCY [MHz]	ATTENUATION [dB/100m]
50	8.8
100	12.2
200	18.1
450	29.0
800	37.8
860	43.3
1000	46.6

ELECTRICAL RESISTANCE AT 20°C	[Ω /km]
CONDUCTOR RESISTANCE	66.0

COAX CABLE

RG 59 B/U 75 Ω -MICRO COAX-

Transmission of a video or audio signal in applications such as security systems or CATV



CONSTRUCTION

Formation:

Copper clad steel - CCS

Insulation:

Low density polyethylene - LDPE

1° Braid:

Bare copper wire braid - Coverage: 90%

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

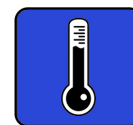
TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Impedance:

50 Ohm

Capacitance:

100 pF/m

Velocity of Propagation:

66%

Operating Voltage:

300 V

CHARACTERISTICS

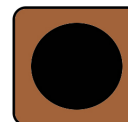
Coaxial Cable



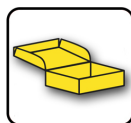
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



WARNING

These cables can be installed along with power cables marked 450/750 V or 0,6/1 kV operating with systems having maximum voltage to ground 400 V AC



COAX CABLE

RG 59 B/U 75 Ω -MICRO COAX-

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
RG59MINI-GI-D3	3.6	55

FREQUENCY [MHz]	ATTENUATION [dB/100m]
50	7.7
100	11.2
200	16.0
400	24.1
800	34.0
1000	38.7

ELECTRICAL RESISTANCE AT 20°C	[Ω/km]
CONDUCTOR RESISTANCE	148

COAX CABLE

RG 11 B/U 75 Ω

Standard Version



CONSTRUCTION

Formation:

Tinned copper wire, 7 strand

Insulation:

Low density polyethylene - LDPE

Braid:

Bare copper wire braid - Coverage: 90%

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Impedance:

50 Ohm

Capacitance:

100 pF/m

Velocity of Propagation:

66%

Operating Voltage:

300 V

CHARACTERISTICS

Coaxial Cable

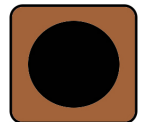


Min. Bending Radius

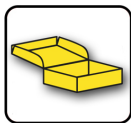
8 x cable diameter



Fixed Laying



PACKAGE:



WARNING

These cables can be installed along with power cables marked 450/750 V or 0,6/1 kV operating with systems having maximum voltage to ground 400 V AC



COAX CABLE

RG 59 B/U 75 Ω

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
RG 213	10.3	103

FREQUENCY [MHz]	ATTENUATION [dB/100m]
50	4.5
100	6.5
200	9.5
400	14.1
800	21.9
1000	23.7

ELECTRICAL RESISTANCE AT 20°C	[Ω /km]
CONDUCTOR RESISTANCE	25.5

COAX CABLE

RG 62 B/U 93 Ω

Standard Version



CONSTRUCTION

Formation:

Bare copper wire

Insulation:

Low density polyethylene - LDPE

Braid:

Bare copper wire braid - Coverage: 95%

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Black

STANDARD REFERENCES

- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Impedance:

93 Ohm

Capacitance:

100 pF/m

Velocity of Propagation:

66%

Operating Voltage:

300 V

CHARACTERISTICS

Coaxial Cable



Min. Bending Radius

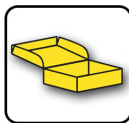
8 x cable diameter



Fixed Laying



PACKAGE:



WARNING

These cables can be installed along with power cables marked 450/750 V or 0,6/1 kV operating with systems having maximum voltage to ground 400 V AC



COAX CABLE

RG 62 B/U 93 Ω

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
RG 62	6.2	57

FREQUENCY [MHz]	ATTENUATION [dB/100m]
50	5.8
100	8.1
200	11.7
400	16.8
800	24.0
1000	27.3

ELECTRICAL RESISTANCE AT 20°C	[Ω /km]
CONDUCTOR RESISTANCE	130

LAN CABLE

Standard Version

U/UTP CAT. 5e 4x2x24 AWG

Standard Version



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyethylene - PE

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- EIA/TIA 568A
- EN 50173
- EN 50288-3-1
- IEC 61156-5
- ISO/IEC 11801
- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

IDENTIFICATION OF CORES

- 1 pair:
- 2 pair:
- 3 pair:
- 4 pair:

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

LANCRO BY RAMCRO – UTP 4x2xAWG24 CAT.5e - PVC - VERIFIED ISO IEC 11801- TIA/EIA 568 - EN 50575: 2014+A1:2016 CPR Class Eca + PN___/yy” METER MARKING”

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 56 nF/km

Velocity of propagation:

67%

Operating Voltage:

300 V

CHARACTERISTICS

Data LAN Cable



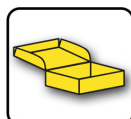
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



LAN CABLE

Standard Version

U/UTP CAT. 5e 4x2x24 AWG

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
UTPLEVEL5-4X2X022+	4.8	31

Technical Performance

FREQUENCY [MHz]	ATTENUATION [dB/100m]	RL [dB]	NEXT [dB]	PSNEXT [dB]	ELFEXT [dB]	PSELFEXT [dB]
1	2	20	65.3	62.3	64	61
4	4.1	23	56.3	53.3	52	49
8	5.8	24.5	51.8	48.8	45.9	42.9
10	6.5	25	50.3	47.3	44	41
16	8.2	25	47.2	44.4	39.9	36.9
20	9.3	25	45.8	42.8	38	35
25	10.4	24.3	44.3	41.3	35.8	33
31.25	11.7	23.6	42.9	39.9	34.1	31.1
62.5	17	21.5	38.4	35.4	28.1	25.1
100	22	20.1	35.3	32.3	24	21

ELECTRICAL RESISTANCE AT 20°C	[Ω /100m]
CONDUCTOR RESISTANCE	11.5

LAN CABLE

Economic Version

U/UTP CAT. 5e 4x2x24 AWG

Economic Version



CONSTRUCTION

Formation:

Copper clad aluminium, Solid (CCA)

Insulation:

Polyethylene - PE

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- EIA/TIA 568A
- EN 50173
- EN 50288-3-1
- IEC 61156-5
- ISO/IEC 11801
- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

IDENTIFICATION OF CORES

- 1 pair:
- 2 pair:
- 3 pair:
- 4 pair:

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

LANCRO BY RAMCRO – UTP 4x2xAWG24 CAT.5e - PVC - VERIFIED ISO IEC 11801- TIA/EIA 568 - EN 50575: 2014+A1:2016 CPR Class Eca + PN___/yy” METER MARKING”

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 56 nF/km

Velocity of propagation:

67%

Operating Voltage:

300 V

CHARACTERISTICS

Data LAN Cable



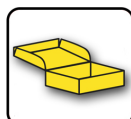
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



LAN CABLE

Economic Version

U/UTP CAT. 5e 4x2x24 AWG

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
UTPLEVEL5-4X2X022+	4.8	31

Technical Performance

FREQUENCY [MHz]	ATTENUATION [dB/100m]	RL [dB]	NEXT [dB]	PSNEXT [dB]	ELFEXT [dB]	PSELFEXT [dB]
1	2	20	65.3	62.3	64	61
4	4.1	23	56.3	53.3	52	49
8	5.8	24.5	51.8	48.8	45.9	42.9
10	6.5	25	50.3	47.3	44	41
16	8.2	25	47.2	44.4	39.9	36.9
20	9.3	25	45.8	42.8	38	35
25	10.4	24.3	44.3	41.3	35.8	33
31.25	11.7	23.6	42.9	39.9	34.1	31.1
62.5	17	21.5	38.4	35.4	28.1	25.1
100	22	20.1	35.3	32.3	24	21

ELECTRICAL RESISTANCE AT 20°C	[Ω /100m]
CONDUCTOR RESISTANCE	11.5

LAN CABLE

Standard Version

U/UTP CAT. 6 4x2x23 AWG

Standard Version



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyethylene - PE

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- EIA/TIA 568A
- EN 50173
- EN 50288-3-1
- IEC 61156-5
- ISO/IEC 11801
- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

IDENTIFICATION OF CORES

- 1 pair:
- 2 pair:
- 3 pair:
- 4 pair:

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

LANCRO BY RAMCRO – UTP 4x2xAWG24 CAT.5e - PVC - VERIFIED ISO IEC 11801- TIA/EIA 568 - EN 50575: 2014+A1:2016 CPR Class Eca + PN___/yy” METER MARKING”

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 56 nF/km

Velocity of propagation:

67%

Operating Voltage:

300 V

CHARACTERISTICS

Data LAN Cable



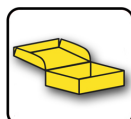
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



LAN CABLE

Standard Version

U/UTP CAT. 6 4x2x23 AWG

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
UTPLEVEL6-4X2X0.22+	4.8	31

Technical Performance

FREQUENCY [MHz]	ATTENUATION [dB/100m]	RL [dB]	NEXT [dB]	PSNEXT [dB]	ELFEXT [dB]	PSELFEXT [dB]
1	2	20	65.3	62.3	64	61
4	4.1	23	56.3	53.3	52	49
8	5.8	24.5	51.8	48.8	45.9	42.9
10	6.5	25	50.3	47.3	44	41
16	8.2	25	47.2	44.4	39.9	36.9
20	9.3	25	45.8	42.8	38	35
25	10.4	24.3	44.3	41.3	35.8	33
31.25	11.7	23.6	42.9	39.9	34.1	31.1
62.5	17	21.5	38.4	35.4	28.1	25.1
100	22	20.1	35.3	32.3	24	21

ELECTRICAL RESISTANCE AT 20°C	[Ω /100m]
CONDUCTOR RESISTANCE	11.5

LAN CABLE

Economic Version

U/UTP CAT. 6 4x2x23 AWG

Economic Version



CONSTRUCTION

Formation:

Copper claded aluminium, Solid (CCA)

Insulation:

Polyethylene - PE

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- EIA/TIA 568A
- EN 50173
- EN 50288-3-1
- IEC 61156-5
- ISO/IEC 11801
- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

IDENTIFICATION OF CORES

- 1 pair:
- 2 pair:
- 3 pair:
- 4 pair:

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

LANCRO BY RAMCRO – UTP 4x2xAWG24 CAT.5e - PVC - VERIFIED ISO IEC 11801- TIA/EIA 568 - EN 50575: 2014+A1:2016 CPR Class Eca + PN___/yy" METER MARKING"

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 56 nF/km

Velocity of propagation:

67%

Operating Voltage:

300 V

CHARACTERISTICS

Data LAN Cable



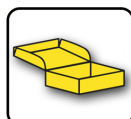
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



58

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LAN CABLE

Economic Version

U/UTP CAT. 6 4x2x23 AWG

Economic Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
UTPLEVEL6-4X2X022	6.3	

Technical Performance

FREQUENCY [MHz]	ATTENUATION [dB/100m]	RL [dB]	NEXT [dB]	PSNEXT [dB]	ELFEXT [dB]	PSELFEXT [dB]
1	2.1	19.0	65.0	62.0	63.3	60.3
4	4.0	19.0	63.0	60.5	51.2	48.2
10	6.3	19.0	56.6	54.0	43.3	40.3
16	8.0	18.0	53.2	50.6	39.2	36.2
20	9.0	17.5	51.6	49.0	37.2	34.2
31.25	11.4	16.5	48.4	45.7	33.4	30.4
62.5	16.5	14.0	43.4	40.6	27.3	24.3
100	21.3	12.0	38.9	37.1	23.3	20.3
200	31.5	9.0	34.8	31.9	17.2	14.2
250	35.9	8.0	33.1	30.2	15.3	12.3

ELECTRICAL RESISTANCE AT 20°C	[Ω /100m]
CONDUCTOR RESISTANCE	11.5

LAN CABLE

Standard Version

U/UTP CAT. 6A 4x2x23 AWG

Standard Version



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyethylene - PE

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- EIA/TIA 568A
- EN 50173
- EN 50288-3-1
- IEC 61156-5
- ISO/IEC 11801
- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

IDENTIFICATION OF CORES

- 1 pair:
- 2 pair:
- 3 pair:
- 4 pair:

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

LANCRO BY RAMCRO – UTP 4x2xAWG24 CAT.5e - PVC - VERIFIED ISO IEC 11801- TIA/EIA 568 - EN 50575: 2014+A1:2016 CPR Class Eca + PN___/yy” METER MARKING”

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 56 nF/km

Velocity of propagation:

67%

Operating Voltage:

300 V

CHARACTERISTICS

Data LAN Cable



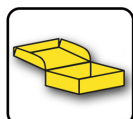
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



60

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LAN CABLE

Standard Version

U/UTP CAT. 6A 4x2x23 AWG

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
UTPLEVEL5-4X2X022+	4.8	31

Technical Performance

FREQUENCY [MHz]	ATTENUATION [dB/100m]	RL [dB]	NEXT [dB]	PSNEXT [dB]	ELFEXT [dB]	PSELFEXT [dB]
1	2	20	65.3	62.3	64	61
4	4.1	23	56.3	53.3	52	49
8	5.8	24.5	51.8	48.8	45.9	42.9
10	6.5	25	50.3	47.3	44	41
16	8.2	25	47.2	44.4	39.9	36.9
20	9.3	25	45.8	42.8	38	35
25	10.4	24.3	44.3	41.3	35.8	33
31.25	11.7	23.6	42.9	39.9	34.1	31.1
62.5	17	21.5	38.4	35.4	28.1	25.1
100	22	20.1	35.3	32.3	24	21

ELECTRICAL RESISTANCE AT 20°C	[Ω /100m]
CONDUCTOR RESISTANCE	11.5

LAN CABLE

Economic Version

U/UTP CAT. 6A 4x2x23 AWG

Economic Version



CONSTRUCTION

Formation:

Copper claded aluminium, Solid (CCA)

Insulation:

Polyethylene - PE

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- EIA/TIA 568A
- EN 50173
- EN 50288-3-1
- IEC 61156-5
- ISO/IEC 11801
- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

IDENTIFICATION OF CORES

- 1 pair:
- 2 pair:
- 3 pair:
- 4 pair:

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

LANCRO BY RAMCRO – UTP 4x2xAWG24 CAT.5e - PVC - VERIFIED ISO IEC 11801- TIA/EIA 568 - EN 50575: 2014+A1:2016 CPR Class Eca + PN___/yy” METER MARKING”

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 56 nF/km

Velocity of propagation:

67%

Operating Voltage:

300 V

CHARACTERISTICS

Data LAN Cable



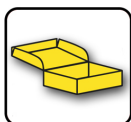
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



LAN CABLE

Economic Version

U/UTP CAT. 6A 4x2x23 AWG

Economic Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
UTPLEVEL5-4X2X022+	4.8	31

Technical Performance

FREQUENCY [MHz]	ATTENUATION [dB/100m]	RL [dB]	NEXT [dB]	PSNEXT [dB]	ELFEXT [dB]	PSELFEXT [dB]
1	2	20	65.3	62.3	64	61
4	4.1	23	56.3	53.3	52	49
8	5.8	24.5	51.8	48.8	45.9	42.9
10	6.5	25	50.3	47.3	44	41
16	8.2	25	47.2	44.4	39.9	36.9
20	9.3	25	45.8	42.8	38	35
25	10.4	24.3	44.3	41.3	35.8	33
31.25	11.7	23.6	42.9	39.9	34.1	31.1
62.5	17	21.5	38.4	35.4	28.1	25.1
100	22	20.1	35.3	32.3	24	21

ELECTRICAL RESISTANCE AT 20°C	[Ω/100m]
CONDUCTOR RESISTANCE	11.5

LAN CABLE

Standard Version

F/UTP CAT. 5e 4x2x23 AWG

Standard Version



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyethylene - PE

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- EIA/TIA 568A
- EN 50173
- EN 50288-3-1
- IEC 61156-5
- ISO/IEC 11801
- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

IDENTIFICATION OF CORES

- 1 pair:
- 2 pair:
- 3 pair:
- 4 pair:

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

LANCRO BY RAMCRO – UTP 4x2xAWG24 CAT.5e - PVC - VERIFIED ISO IEC 11801- TIA/EIA 568 - EN 50575: 2014+A1:2016 CPR Class Eca + PN___/yy” METER MARKING”

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 56 nF/km

Velocity of propagation:

67%

Operating Voltage:

300 V

CHARACTERISTICS

Data LAN Cable



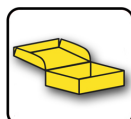
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



LAN CABLE

Standard Version

F/UTP CAT. 5e 4x2x23 AWG

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
UTPLEVEL5-4X2X022+	4.8	31

Technical Performance

FREQUENCY [MHz]	ATTENUATION [dB/100m]	RL [dB]	NEXT [dB]	PSNEXT [dB]	ELFEXT [dB]	PSELFEXT [dB]
1	2	20	65.3	62.3	64	61
4	4.1	23	56.3	53.3	52	49
8	5.8	24.5	51.8	48.8	45.9	42.9
10	6.5	25	50.3	47.3	44	41
16	8.2	25	47.2	44.4	39.9	36.9
20	9.3	25	45.8	42.8	38	35
25	10.4	24.3	44.3	41.3	35.8	33
31.25	11.7	23.6	42.9	39.9	34.1	31.1
62.5	17	21.5	38.4	35.4	28.1	25.1
100	22	20.1	35.3	32.3	24	21

ELECTRICAL RESISTANCE AT 20°C	[Ω /100m]
CONDUCTOR RESISTANCE	11.5

LAN CABLE

Standard Version

F/UTP CAT. 6 4x2x23 AWG

Standard Version



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyethylene - PE

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- EIA/TIA 568A
- EN 50173
- EN 50288-3-1
- IEC 61156-5
- ISO/IEC 11801
- IEC 60332-1

ON REQUEST

- Armor in steel wire (SWA)
- Armor in steel wire braid (SWB)
- Outer Sheath in LSZH
- Double outer sheath (for external use)

IDENTIFICATION OF CORES

- 1 pair:
- 2 pair:
- 3 pair:
- 4 pair:

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

LANCRO BY RAMCRO – UTP 4x2xAWG24 CAT.5e - PVC - VERIFIED ISO IEC 11801- TIA/EIA 568 - EN 50575: 2014+A1:2016 CPR Class Eca + PN___/yy” METER MARKING”

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 56 nF/km

Velocity of propagation:

67%

Operating Voltage:

300 V

CHARACTERISTICS

Data LAN Cable



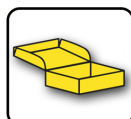
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



LAN CABLE

Standard Version

F/UTP CAT. 6 4x2x23 AWG

Standard Version

RAMCRO CODE	OUTER DIAMETER [mm]	WEIGHT [kg/km]
F/UTPLEVEL64X2X022+	7.2	52

Technical Performance

FREQUENCY [MHz]	ATTENUATION [dB/100m]	RL [dB]	NEXT [dB]	PSNEXT [dB]	ELFEXT [dB]	PSELFEXT [dB]
1	2	20	65.3	62.3	64	61
4	4.1	23	56.3	53.3	52	49
8	5.8	24.5	51.8	48.8	45.9	42.9
10	6.5	25	50.3	47.3	44	41
16	8.2	25	47.2	44.4	39.9	36.9
20	9.3	25	45.8	42.8	38	35
25	10.4	24.3	44.3	41.3	35.8	33
31.25	11.7	23.6	42.9	39.9	34.1	31.1
62.5	17	21.5	38.4	35.4	28.1	25.1
100	22	20.1	35.3	32.3	24	21

ELECTRICAL RESISTANCE AT 20°C	[Ω /100m]
CONDUCTOR RESISTANCE	11.5

TELEPHONE CABLE

Standard Version

TRR

Standard Version



CONSTRUCTION

Formation:

Tinned Copper Claded Aluminium, Solid

Insulation:

Polyvinyl chloride - PVC

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- CEI 20-29
- CEI 20-11
- CEI UNEL 36762
- CEI 46-5

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

IDENTIFICATION OF CORES

- In according to CEI UNEL 00724

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Operating Voltage:

300 V

CHARACTERISTICS

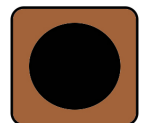
Telephone Cable



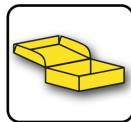
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



TELEPHONE CABLE

Standard Version

TRR

Standard Version

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
TRR1T	1x2x0.60 + T	3.4	134.0
TRR2T	2x2x0.60 + T	4.8	134.0
TRR3	3x2x0.60	5.2	134.0
TRR4	4x2x0.60	5.8	134.0
TRR5	5x2x0.60	6.0	134.0
TRR6	6x2x0.60	7.0	134.0
TRR8	8x2x0.60	7.4	134.0
TRR101	11x2x0.60	8.6	134.0
TRR151	16x2x0.60	10.0	134.0
TRR201	21x2x0.60	11.2	134.0

TELEPHONE CABLE

Standard Version

TRHR

Standard Version



CONSTRUCTION

Formation:

Tinned Copper Claded Aluminium, Solid

Insulation:

Polyvinyl chloride - PVC

Rip Cord:

Nylon rip cord

Outer Sheath:

PVC

Colour Outer Sheath:

White

STANDARD REFERENCES

- CEI 20-29
- CEI 20-11
- CEI UNEL 36762
- CEI 46-5

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

IDENTIFICATION OF CORES

- In according to CEI UNEL 00724

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 56 nF/km

Operating Voltage:

300 V

CHARACTERISTICS

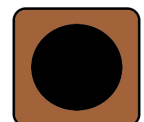
Telephone Cable



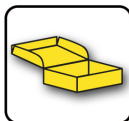
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



70

Via Marzorati, 15 - 20014 Nerviano - Milan - Italy / www.ramcro.com



TELEPHONE CABLE

Standard Version

TRHR

Standard Version

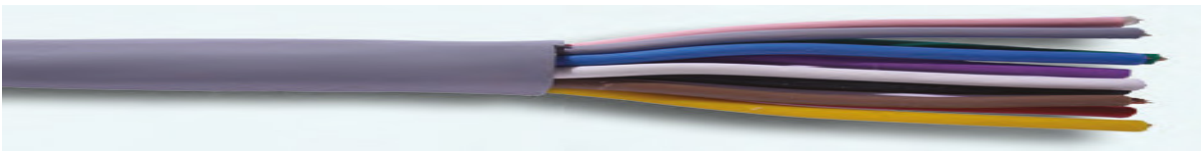
RAMCRO CODE	FORMATION [n° x mm]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
TRHR1T	1x2x0.60 + T	3.8	134.0
TRHR2T	2x2x0.60 + T	5.2	134.0
TRHR3	3x2x0.60	5.4	134.0
TRHR4	4x2x0.60	6.2	134.0
TRHR5	5x2x0.60	6.3	134.0
TRHR6	6x2x0.60	7.4	134.0
TRHR8	8x2x0.60	7.8	134.0
TRHR101	10x2x0.60 + 1x2x0.60	8.8	134.0
TRHR151	15x2x0.60 + 1x2x0.60	10.2	134.0
TRHR201	20x2x0.60 + 1x2x0.60	11.4	134.0
TRHR251	24x2x0.60 + 1x2x0.60	12.4	134.0
TRHR301	30x2x0.60 + 1x2x0.60	13.4	134.0
TRHR501	50x2x0.60 + 1x2x0.60	16.8	134.0
TRHR100	100x2x0.60	23.4	134.0

ACCESS & CONTROL CABLE

Standard Version

VCS

Standard Version



CONSTRUCTION

Formation:

Copper Claded Aluminium - CCA, Multistrand

Insulation:

Polyvinyl chloride - PVC

Rip Cord:

Nylon rip cord

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- CEI 20-29
- CEI 20-11
- CEI UNEL 36762
- CEI 46-5

ON REQUEST

- Armour in steel wire braid
- Personalized colour code and outer sheath

IDENTIFICATION OF CORES

- In according to CEI UNEL 00724

CPR CLASSIFICATION

EN 50575:2016 - E_{CA}

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Operating Voltage:

300 V

CHARACTERISTICS

Access & Control



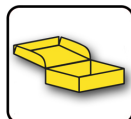
Min. Bending Radius
8 x cable diameter



Fixed Laying



PACKAGE:



ACCESS & CONTROL CABLE

Standard Version

VCS

Standard Version

RAMCRO CODE	FORMATION [n° x mm]	OUTER DIAMETER [mm]	MAX RESISTANCE AT 20°C [Ohm/km]
VCS0250HAAAC	2x0.50	4.2	83.6
VCS0350HAAAC	3x0.50	4.4	83.6
VCS0450HAAAC	4x0.50	5.0	83.6
VCS0650HAAAC	6x0.50	5.9	83.6
VCS0850HAAAC	8x0.50	6.7	83.6
VCS1050HAAAC	10x0.50	7.6	83.6
VCS1250HAAAC	12x0.50	7.8	83.6
VCS1450HAAAC	14x0.50	8.5	83.6
VCS1650HAAAC	16x0.50	8.8	83.6
VCS0250IAAAC	2x0.50	5.4	83.6
VCS0450IAAAC	4x0.50	6.4	83.6
VCS0650IAAAC	6x0.50	7.1	83.6
VCS0850IAAAC	8x0.50	7.9	83.6

CEI 20-105 - FG40HM1 PH30

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FG40HM1



CA01.00716

CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or Violet

STANDARD REFERENCES

- CEI 20-105
- UNI 9795
- CEI 20-36
- CEI EN 60332-3-25

IDENTIFICATION OF CORES

2 cores: ● ●

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FG40HM1 - UNI 9795 - CEI 20-36/4-0 PH30 IEMMEQU
2x1 mmq CEI EN 60332-3-25 - 100/100 V - Uo400 V + BATCH + YEAR OF PRODUCTION

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



Italian Market



CEI 20-105 - FG4OHM1 PH30

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HFEEH-F3FG4	2x0.50*	5.6*	39	39.8
SAS0275HFEEH-F3FG4	2x0.75*	6.3*	49	26.5
SAS0210HFEEH-F3FG4	2x1.00*	7.6*	67	19.9
SAS0215HFEEH-F3FG4	2x1.50*	8.6*	88	13.6
SAS0225HFEEH-F3FG4	2x2.50*	10.1*	129	8.1
SAS0240HFEEH-F3FG4	2x4.00	10.9	158	5.0

* Cables certified by IMQ

Cables for EVAC voice evacuation systems - Violet Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HXEEH-F3FG4	2x0.50*	5.6*	39	39.8
SAS0275HXEEH-F3FG4	2x0.75*	6.3*	49	26.5
SAS0210HXEEH-F3FG4	2x1.00*	7.6*	67	19.9
SAS0215HXEEH-F3FG4	2x1.50*	8.6*	88	13.6
SAS0225HXEEH-F3FG4	2x2.50*	10.1*	129	8.1
SAS0240HXEEH-F3FG4	2x4.00	10.9	158	5.0

* Cables certified by IMQ

FIRE COMET

CEI 20-105 - FG40HM1 PH120

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FG40HM1



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or Violet

STANDARD REFERENCES

- CEI 20-105
- UNI 9795
- CEI 20-36
- CEI EN 60332-3-25

IDENTIFICATION OF CORES

2 cores: ● ●

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FG40HM1 - UNI 9795 - CEI 20-36/4-0 (PH120) 2x1 mmq CEI EN 60332-3-25 - 100/100 V - Uo400 V + BATCH + YEAR OF PRODUCTION

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



Italian Market



FIRE COMET

CEI 20-105 - FG4OHM1 PH120

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HFEEH-F3FG4120	2x0.50	5.6	38	39.8
SAS0275HFEEH-F3FG4120	2x0.75	6.3	48	26.5
SAS0210HFEEH-F3FG4120	2x1.00	7.6	68	19.9
SAS0215HFEEH-F3FG4120	2x1.50	8.6	88	13.6
SAS0225HFEEH-F3FG4120	2x2.50	10.1	128	8.1
SAS0240HFEEH-F3FG4120	2x4.00	10.9	157	5.0

Cables for EVAC voice evacuation systems - Violet Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HXEEH-F3FG4120	2x0.50	5.6	38	39.8
SAS0275HXEEH-F3FG4120	2x0.75	6.3	48	26.5
SAS0210HXEEH-F3FG4120	2x1.00	7.6	68	19.9
SAS0215HXEEH-F3FG4120	2x1.50	8.6	88	13.6
SAS0225HXEEH-F3FG4120	2x2.50	10.1	128	8.1
SAS0240HXEEH-F3FG4120	2x4.00	10.9	157	5.0

FIRE COMET

CEI 20-105 - FTE4OHM1 PH30

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FTE4OHM1



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or Violet

STANDARD REFERENCES

- CEI 20-105
- UNI 9795
- CEI 20-36
- CEI EN 60332-3-25

IDENTIFICATION OF CORES

2 cores: ● ●

TEMPERATURE RANGE

- During Operation:**
-30° C up to +180°C
- During Installation:**
-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FTE4OHM1 - UNI 9795 - CEI 20-36/4-0 (PH30) 2x1 mmq
CEI EN 60332-3-25 - 100/100 V - Uo400 V + year of production

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



Italian Market



FIRE COMET

CEI 20-105 - FTE4OHM1 PH30

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HFEOH-F3FG4	2x0.50	5.6	38	39.8
SAS0275HFEOH-F3FG4	2x0.75	6.3	48	26.5
SAS0210HFEOH-F3FG4	2x1.00	7.6	68	19.9
SAS0215HFEOH-F3FG4	2x1.50	8.6	88	13.6
SAS0225HFEOH-F3FG4	2x2.50	10.1	128	8.1
SAS0240HFEOH-F3FG4	2x4.00	10.9	157	5.0

Cables for EVAC voice evacuation systems - Violet Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HXEOH-F3FG4	2x0.50	5.6	38	39.8
SAS0275HXEOH-F3FG4	2x0.75	6.3	48	26.5
SAS0210HXEOH-F3FG4	2x1.00	7.6	68	19.9
SAS0215HXEOH-F3FG4	2x1.50	8.6	88	13.6
SAS0225HXEOH-F3FG4	2x2.50	10.1	128	8.1
SAS0240HXEOH-F3FG4	2x4.00	10.9	157	5.0

FIRE COMET

CEI 20-105 - FTE4OHM1 PH120

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FTE4OHM1



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or Violet

STANDARD REFERENCES

- CEI 20-105
- UNI 9795
- CEI 20-36
- CEI EN 60332-3-25

IDENTIFICATION OF CORES

2 cores: ● ●

TEMPERATURE RANGE

- During Operation:**
-30° C up to +180°C
- During Installation:**
-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FTE4OHM1 - UNI 9795 - CEI 20-36/4-0 (PH120) 2x1 mmq CEI EN 60332-3-25 - 100/100 V - Uo400 V + year of production

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



Italian Market



FIRE COMET

CEI 20-105 - FTE4OHM1 PH120

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HFEOH-F3FG4120	2x0.50	7.0	53	39.8
SAS0275HFEOH-F3FG4120	2x0.75	7.5	61	26.5
SAS0210HFEOH-F3FG4120	2x1.00	7.8	67	19.9
SAS0215HFEOH-F3FG4120	2x1.50	8.6	86	13.6
SAS0225HFEOH-F3FG4120	2x2.50	9.6	115	8.1
SAS0240HFEOH-F3FG4120	2x4.00	11.1	157	5.0

Cables for EVAC voice evacuation systems - Violet Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HXEOH-F3FG4120	2x0.50	7.0	53	39.8
SAS0275HXEOH-F3FG4120	2x0.75	7.5	61	26.5
SAS0210HXEOH-F3FG4120	2x1.00	7.8	67	19.9
SAS0215HXEOH-F3FG4120	2x1.50	8.6	86	13.6
SAS0225HXEOH-F3FG4120	2x2.50	9.6	115	8.1
SAS0240HXEOH-F3FG4120	2x4.00	11.1	157	5.0



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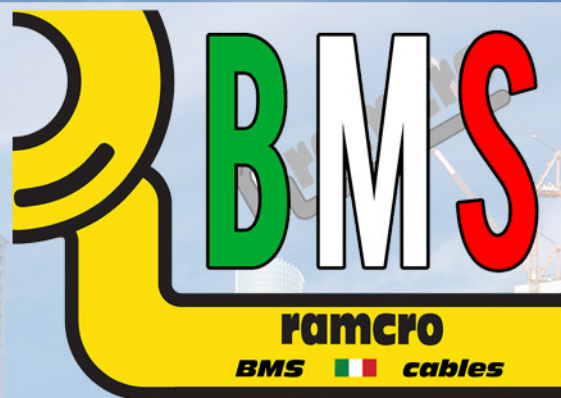
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QD 06/01

Edited by Sales Director on March 2019

Dr. Carlo Croci

Approved by AQ: PC



CONTROL & BMS CABLE CATALOGUE



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GENERAL INTRODUCTION

All PVC, LSZH(FRNC) and LSF sheathed multi-conductor cables are suitable for Building Management Systems (BMS), Sound, Audio, Security, Safety, Control and Instrumentation.

Where is needed to provide the solutions for the exchange and storage of information to keep businesses efficient, on top and performing, these include heating, ventilation, air conditioning as well as lighting, security systems and the operation of electric/electronic appliances.

These type of cable are suitable for a lot of installations:

- Industrial Use
- CCTV intrusion and access
- CATV Systems
- Audio and Video Systems
- Residential



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

Unscreened multi-conductor cable with a PVC sheath are suitable for Building Management Systems (BMS), Sound, Audio, Security, Safety, Control and Instrumentation

RAMCRO BMS



CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Polypropylene - PP

Cable twisting:

Two or more wire twisted

Outer Sheath:

Polyvinyl chloride - PVC

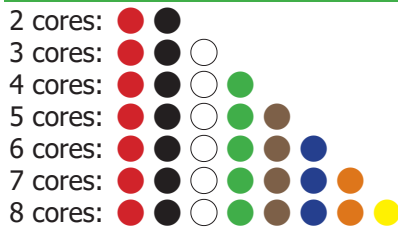
Colour Outer Sheath:

Grey

STANDARD REFERENCES

- (BS) EN 50290-2
- IEC 60228
- IEC 60332-1 for PVC sheath
- IEC 60332-3-24 for LSZH(FRNC) sheath
- IEC 60754-1&2 for LSZH(FRNC) sheath
- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF CORES



TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R_____ - AUDIO CONTROL & INSTRUMENTATION CABLE 2C 22AWG
UNSCREENED PVC 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + BATCH + METER MARKING

ELECTRICAL DATA

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Building Management Systems Cable



Min. Bending Radius

8 x cable diameter



Put up length 305 mt



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

PVC sheathed, unshielded cables with 22AWG to 12AWG conductors

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SSS0207HBAXH-RB	R1227	2x22AWG	3.1	13	56.7	40.0
SSS0307HBAXX-RB	R1278	3x22AWG	3.3	17	56.7	35.0
SSS0407HBAXX-RB	R1231	4x22AWG	3.6	22	56.7	45.0
SSS0607HBAXX-RB	R1265	6x22AWG	4.2	30	56.7	45.0
SSS0807HBAXX-RB	R1233	8x22AWG	4.6	38	56.7	45.0
SSS0206HBAXH-RB	R1020	2x20AWG	3.5	18	37.2	46.0
SSS0306HBAXX-RB	R1022	3x20AWG	3.7	24	37.2	47.0
SSS0406HBAXX-RB	R1024	4x20AWG	4.0	30	37.2	47.0
SSS0606HBAXX-RB	R1261	6x20AWG	4.8	42	37.2	45.0
SSS0806HBAXX-RB	R1263	8x20AWG	5.3	54	37.2	45.0
SSS0205HBAXH-RB	R1014	2x18AWG	3.9	24	22.9	52.0
SSS0305HBAXX-RB	R1016	3x18AWG	4.1	33	22.9	55.0
SSS0405HBAXX-RB	R1018	4x18AWG	4.5	42	22.9	45.0
SSS0505HBAXX-RB	R1054	5x18AWG	4.8	61	22.9	45.0
SSS0605HBAXX-RB	R1212	6x18AWG	5.4	61	22.9	50.0
SSS0705HBAXX-RB	R1239	7x18AWG	5.8	80	22.9	50.0
SSS0805HBAXX-RB	R1259	8x18AWG	6.0	78	22.9	50.0
SSS0203HBAXH-RB	R1008	2x16AWG	4.6	34	15.5	53.0
SSS0303HBAXX-RB	R1010	3x16AWG	4.9	46	15.5	56.0
SSS0403HBAXX-RB	R1012	4x16AWG	5.4	59	15.5	55.0
SSS0603HBAXX-RB	R1253	6x16AWG	6.5	85	15.5	48.0
SSS0803HBAXX-RB	R1255	8x16AWG	7.1	111	15.5	45.0
SSS0201HBAXH-RB	R1002	2x14AWG	5.5	51	9.3	51.0
SSS0301HBAXX-RB	R1004	3x14AWG	5.9	72	9.3	55.0
SSS0401HBAXX-RB	R1006	4x14AWG	6.5	93	9.3	55.0
SSS0601HBAXX-RB	R1249	6x14AWG	7.8	135	9.3	50.0
SSS0801HBAXX-RB	R1251	8x14AWG	8.7	177	9.3	50.0
SSS0252HBAXH-RB	R1323	2x12AWG	6.7	79	5.7	60.0
SSS0352HBAXX-RB	R1325	3x12AWG	7.1	112	5.7	60.0
SSS0452HBAXX-RB	R1327	4x12AWG	7.9	146	5.7	60.0
SSS0552HBAXX-RB	R1329	5x12AWG	8.1	163	5.7	60.0
SSS0652HBAXX-RB	R1331	6x12AWG	8.7	180	5.7	60.0
SSS0852HBAXX-RB	R1333	8x12AWG	9.6	214	5.7	60.0



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

Screened multi-conductor cable with a PVC sheath are suitable for Building Management Systems (BMS), Sound, Audio, Security, Safety, Control and Instrumentation



CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Polypropylene - PP

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF CORES



TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R____ - AUDIO CONTROL & INSTRUMENTATION CABLE 2C 22AWG
SCREENED PVC 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + BATCH + METER MARKING

ELECTRICAL DATA

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

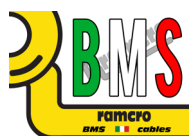
Building Management Systems Cable**Min. Bending Radius**
8 x cable diameter**Put up lenght 305 mt**

AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

PVC sheathed, screened cables with 22AWG to 12AWG conductors

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAS0207HBAXH-RB	R1226	2x22AWG	3.2	16	56.7	78.0
SAS0307HBAXX-RB	R1228	3x22AWG	3.4	20	56.7	75.0
SAS0407HBAXX-RB	R1230	4x22AWG	3.6	24	56.7	70.0
SAS0607HBAXX-RB	R1264	6x22AWG	4.3	33	56.7	64.0
SAS0807HBAXX-RB	R1232	8x22AWG	4.7	41	56.7	60.0
SAS0206HBAXH-RB	R1019	2x20AWG	3.6	21	37.2	100.0
SAS0306HBAXX-RB	R1021	3x20AWG	3.8	26	37.2	90.0
SAS0406HBAXX-RB	R1023	4x20AWG	4.1	32	37.2	90.0
SAS0406HBAXX-RB	R1023	4x20AWG	4.1	32	37.2	90.0
SAS0606HBAXX-RB	R1260	6x20AWG	4.9	45	37.2	90.0
SAS0806HBAXX-RB	R1262	8x20AWG	5.4	57	37.2	75.0
SAS0205HBAXH-RB	R1013	2x18AWG	4.0	27	22.9	95.0
SAS0305HBAXX-RB	R1015	3x18AWG	4.2	36	22.9	90.0
SAS0405HBAXX-RB	R1017	4x18AWG	4.6	45	22.9	75.0
SAS0605HBAXX-RB	R1211	6x18AWG	5.5	64	22.9	75.0
SAS0705HBAXX-RB	R1239	7x18AWG	5.8	75	22.9	75.0
SAS0805HBAXX-RB	R1258	8x18AWG	6.0	72	22.9	75.0
SAS0203HBAXH-RB	R1007	2x16AWG	4.7	81	15.5	105.0
SAS0303HBAXX-RB	R1009	3x16AWG	5.0	49	15.5	105.0
SAS0403HBAXX-RB	R1011	4x16AWG	5.4	62	15.5	90.0
SAS0603HBAXX-RB	R1252	6x16AWG	6.5	88	15.5	80.0
SAS0803HBAXX-RB	R1254	8x16AWG	7.2	114	15.5	80.0
SAS0201HBAXH-RB	R1001	2x14AWG	5.6	54	9.3	105.0
SAS0301HBAXX-RB	R1003	3x14AWG	5.9	75	9.3	100.0
SAS0401HBAXX-RB	R1005	4x14AWG	6.5	96	9.3	98.0
SAS0501HBAXX-RB	R1209	5x14AWG	6.8	111	9.3	98.0
SAS0601HBAXX-RB	R1248	6x14AWG	7.9	139	9.3	96.0
SAS0801HBAXX-RB	R1250	8x14AWG	8.7	180	9.3	95.0
SAS0252HBAXH-RB	R1322	2x12AWG	6.8	82	5.7	105.0
SAS0352HBAXX-RB	R1324	3x12AWG	7.2	115	5.7	105.0
SAS0452HBAXX-RB	R1326	4x12AWG	8.0	149	5.7	100.0
SAS0552HBAXX-RB	R1328	5x12AWG	8.2	161	5.7	100.0
SAS0652HBAXX-RB	R1330	6x12AWG	9.7	217	5.7	100.0
SAS0852HBAXX-RB	R1332	8x12AWG	10.8	284	5.7	100.0



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

Unscreened multi-conductor cable with a LSZH(FRNC) sheath are suitable for Building Management Systems (BMS), Sound, Audio, Security, Safety, Control and Instrumentation

RAMCRO BMS



CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Polyolefine - PO

Cable twisting:

Two or more wire twisted

Outer Sheath:

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF CORES



TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R_____ - AUDIO CONTROL & INSTRUMENTATION CABLE 2C 22AWG SCREENED LSZH(FRNC) 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + BATCH + METER MARKING

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Building Management Systems Cable



Min. Bending Radius

8 x cable diameter



Put up length 305 mt

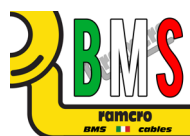


AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

LSZH(FRNC) sheathed, unshielded cables with 22AWG to 12AWG conductors

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SSS0207HXEDH-RB	R1742	2x22AWG	3.3	14	56.7	65.0
SSS0307HXEDX-RB	R1744	3x22AWG	3.5	18	56.7	70.0
SSS0407HXEDX-RB	R1746	4x22AWG	3.8	22	56.7	72.0
SSS0607HXEDX-RB	R1748	6x22AWG	4.5	31	56.7	75.0
SSS0807HXEDX-RB	R1750	8x22AWG	4.9	40	56.7	75.0
SSS0206HXEDH-RB	R1732	2x20AWG	3.5	17	37.2	65.0
SSS0306HXEDX-RB	R1734	3x20AWG	3.7	23	37.2	65.0
SSS0406HXEDX-RB	R1736	4x20AWG	4.0	29	37.2	68.0
SSS0506HXEDX-RB	R1753	5x20AWG	4.2	35	37.2	68.0
SSS0606HXEDX-RB	R1738	6x20AWG	4.8	41	37.2	70.0
SSS0806HXEDX-RB	R1740	8x20AWG	5.3	52	37.2	70.0
SSS0205HXEDH-RB	R1722	2x18AWG	3.9	24	22.9	65.0
SSS0305HXEDX-RB	R1724	3x18AWG	4.1	33	22.9	70.0
SSS0405HXEDX-RB	R1726	4x18AWG	4.5	42	22.9	72.0
SSS0605HXEDX-RB	R1728	6x18AWG	5.4	60	22.9	75.0
SSS0805HXEDX-RB	R1730	8x18AWG	6.0	77	22.9	75.0
SSS0203HXEDH-RB	R1712	2x16AWG	4.6	33	15.5	65.0
SSS0303HXEDX-RB	R1714	3x16AWG	4.9	45	15.5	72.0
SSS0403HXEDX-RB	R1716	4x16AWG	5.4	58	15.5	72.0
SSS0603HXEDX-RB	R1718	6x16AWG	6.5	85	15.5	74.0
SSS0803HXEDX-RB	R1720	8x16AWG	7.1	110	15.5	75.0
SSS0201HXEDH-RB	R1702	2x14AWG	5.5	51	9.3	75.0
SSS0301HXEDX-RB	R1704	3x14AWG	5.9	71	9.3	75.0
SSS0401HXEDX-RB	R1706	4x14AWG	6.5	92	9.3	77.0
SSS0601HXEDX-RB	R1708	6x14AWG	7.8	134	9.3	80.0
SSS0801HXEDX-RB	R1710	8x14AWG	8.7	176	9.3	80.0
SSS0252HXEDH-RB	R1335	2x12AWG	6.7	78	5.7	75.0
SSS0352HXEDX-RB	R1337	3x12AWG	7.1	110	5.7	76.0
SSS0452HXEDX-RB	R1339	4x12AWG	7.9	144	5.7	80.0
SSS0552HXEDX-RB	R1341	5x12AWG	8.1	151	5.7	80.0
SSS0652HXEDX-RB	R1343	6x12AWG	9.6	211	5.7	80.0
SSS0852HXEDX-RB	R1345	8x12AWG	10.7	277	5.7	80.0



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

Screened multi-conductor cable with a LSZH(FRNC) sheath are suitable for Building Management Systems (BMS), Sound, Audio, Security, Safety, Control and Instrumentation

RAMCRO BMS



CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Polyolefine - PO

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF CORES



TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R____ - AUDIO CONTROL & INSTRUMENTATION CABLE 2C 22AWG UNSCREENED LSZH(FRNC) 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + BATCH + METER MARKING

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Building Management Systems Cable



Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt

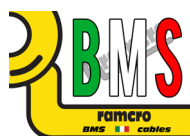


AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

LSZH(FRNC) sheathed, screened cables with 22AWG to 12AWG conductors

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAS0207HXEDH-RB	R1741	2x22AWG	3.4	16	56.7	115.0
SAS0307HXEDX-RB	R1743	3x22AWG	3.6	21	56.7	110.0
SAS0407HXEDX-RB	R1745	4x22AWG	3.9	25	56.7	110.0
SAS0607HXEDX-RB	R1747	6x22AWG	4.6	35	56.7	105.0
SAS0807HXEDX-RB	R1749	8x22AWG	5.0	43	56.7	100.0
SAS1207HXEDX-RB	R1752	12x22AWG	6.1	73	56.7	100.0
SAS0206HXEDH-RB	R1731	2x20AWG	3.6	20	37.2	138.0
SAS0306HXEDX-RB	R1733	3x20AWG	3.8	26	37.2	140.0
SAS0406HXEDX-RB	R1735	4x20AWG	4.1	32	37.2	120.0
SAS0606HXEDX-RB	R1737	6x20AWG	4.9	44	37.2	115.0
SAS0806HXEDX-RB	R1739	8x20AWG	5.4	56	37.2	115.0
SAS0205HXEDH-RB	R1721	2x18AWG	4.0	27	22.9	150.0
SAS0305HXEDX-RB	R1723	3x18AWG	4.2	35	22.9	150.0
SAS0405HXEDX-RB	R1725	4x18AWG	4.6	45	22.9	150.0
SAS0605HXEDX-RB	R1727	6x18AWG	5.5	63	22.9	140.0
SAS0805HXEDX-RB	R1729	8x18AWG	6.0	81	22.9	135.0
SAS0203HXEDH-RB	R1711	2x16AWG	4.7	36	15.5	170.0
SAS0303HXEDX-RB	R1713	3x16AWG	5.0	48	15.5	168.0
SAS0403HXEDX-RB	R1715	4x16AWG	5.4	62	15.5	165.0
SAS0603HXEDX-RB	R1717	6x16AWG	6.5	88	15.5	150.0
SAS0803HXEDX-RB	R1719	8x16AWG	7.2	113	15.5	146.0
SAS0201HXEDH-RB	R1701	2x14AWG	5.6	54	9.3	190.0
SAS0301HXEDX-RB	R1703	3x14AWG	5.9	74	9.3	185.0
SAS0401HXEDX-RB	R1705	4x14AWG	6.5	95	9.3	183.0
SAS0601HXEDX-RB	R1707	6x14AWG	7.9	118	9.3	178.0
SAS0801HXEDX-RB	R1709	8x14AWG	8.7	140	9.3	173.0
SAS0252HXEDH-RB	R1334	2x12AWG	6.8	81	5.7	190.0
SAS0352HXEDX-RB	R1336	3x12AWG	7.2	114	5.7	190.0
SAS0452HXEDX-RB	R1338	4x12AWG	8.0	147	5.7	190.0
SAS0552HXEDX-RB	R1340	5x12AWG	8.3	165	5.7	190.0
SAS0652HXEDX-RB	R1342	6x12AWG	9.7	215	5.7	180.0
SAS0852HXEDX-RB	R1344	8x12AWG	10.8	281	5.7	176.0



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

Unscreened multi-conductor cable with a LSF sheath are suitable for Building Management Systems (BMS), Sound, Audio, Security, Safety, Control and Instrumentation

RAMCRO BMS



CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Polypropylene - PP

Cable twisting:

Two or more wire twisted

Outer Sheath:

Low Smoke Fume - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF CORES



TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO ITALY - R_____ - AUDIO CONTROL & INSTRUMENTATION CABLE 2C 22AWG UNSCREENED LSF 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + BATCH + METER MARKING

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Building Management Systems Cable



Min. Bending Radius

8 x cable diameter



Put up length 305 mt

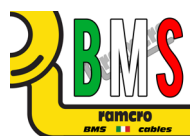


AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

LSF sheathed, Unscreened cables with 22AWG to 12AWG conductors

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SSS0207HBSXH-RB	R4060	2x22AWG	3.1	13	56.7	40.0
SSS0307HBSXX-RB	R4061	3x22AWG	3.3	17	56.7	35.0
SSS0407HBSXX-RB	R4062	4x22AWG	3.6	22	56.7	45.0
SSS0607HBSXX-RB	R4063	6x22AWG	4.2	30	56.7	45.0
SSS0807HBSXX-RB	R4064	8x22AWG	4.6	38	56.7	45.0
SSS0206HBSXH-RB	R4084	2x20AWG	3.5	18	37.2	46.0
SSS0306HBSXX-RB	R4085	3x20AWG	3.7	24	37.2	47.0
SSS0406HBSXX-RB	R4086	4x20AWG	4.0	30	37.2	47.0
SSS0606HBSXX-RB	R4087	6x20AWG	4.8	42	37.2	45.0
SSS0806HBSXX-RB	R4088	8x20AWG	5.3	54	37.2	45.0
SSS0205HBSXH-RB	R4028	2x18AWG	3.9	24	22.9	52.0
SSS0305HBSXX-RB	R4029	3x18AWG	4.1	33	22.9	55.0
SSS0405HBSXX-RB	R4030	4x18AWG	4.5	42	22.9	45.0
SSS0505HBSXX-RB	R4031	5x18AWG	4.7	53	22.9	45.0
SSS0605HBSXX-RB	R4032	6x18AWG	5.4	61	22.9	50.0
SSS0605HBSXX-RB	R4033	7x18AWG	5.7	75	22.9	50.0
SSS0805HBSXX-RB	R4034	8x18AWG	6.0	78	22.9	50.0
SSS1205HBSXX-RB	R4035	12x18AWG	7.0	95	22.9	50.0
SSS0203HBSXH-RB	R4023	2x16AWG	4.6	34	15.5	53.0
SSS0303HBSXX-RB	R4024	3x16AWG	4.9	46	15.5	56.0
SSS0403HBSXX-RB	R4025	4x16AWG	5.4	59	15.5	55.0
SSS0603HBSXX-RB	R4026	6x16AWG	6.5	85	15.5	48.0
SSS0803HBSXX-RB	R4027	8x16AWG	7.1	111	15.5	45.0
SSS0201HBSXH-RB	R4080	2x14AWG	5.5	51	9.3	51.0
SSS0301HBSXX-RB	R4082	3x14AWG	5.9	72	9.3	55.0
SSS0401HBSXX-RB	R4084	4x14AWG	6.5	93	9.3	55.0
SSS0601HBSXX-RB	R4086	6x14AWG	7.8	135	9.3	50.0
SSS0801HBSXX-RB	R4088	8x14AWG	8.7	177	9.3	50.0
SSS0252HBSXH-RB	R4052	2x12AWG	6.7	79	5.7	60.0
SSS0352HBSXX-RB	R4054	3x12AWG	7.1	112	5.7	60.0
SSS0452HBSXX-RB	R4056	4x12AWG	7.9	146	5.7	60.0
SSS0652HBSXX-RB	R4058	6x12AWG	8.7	180	5.7	60.0
SSS0852HBSXX-RB	R4057	8x12AWG	9.6	214	5.7	60.0



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

Screened multi-conductor cable with a LSF sheath are suitable for Building Management Systems (BMS), Sound, Audio, Security, Safety, Control and Instrumentation



CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded

Insulation:

Polypropylene - PP

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Low Smoke Fume - LSF

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF CORES



TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R____ - AUDIO CONTROL & INSTRUMENTATION CABLE 2C 22AWG SCREENED LSF 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + BATCH + METER MARKING

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Building Management Systems Cable



Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

LSF sheathed, Unscreened cables with 22AWG to 12AWG conductors

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAS0207HBSXH-RB	R4133	2x22AWG	3.2	16	56.7	78.0
SAS0307HBSXX-RB	R4135	3x22AWG	3.4	20	56.7	75.0
SAS0407HBSXX-RB	R4137	4x22AWG	3.6	24	56.7	70.0
SAS0607HBSXX-RB	R4138	6x22AWG	4.3	33	56.7	64.0
SAS0807HBSXX-RB	R4139	8x22AWG	4.7	41	56.7	60.0
SAS0206HBSXH-RB	R4115	2x20AWG	3.6	21	37.2	100.0
SAS0306HBSXX-RB	R4116	3x20AWG	3.8	26	37.2	90.0
SAS0406HBSXX-RB	R4117	4x20AWG	4.1	32	37.2	90.0
SAS0606HBSXX-RB	R4118	6x20AWG	4.9	45	37.2	90.0
SAS0806HBSXX-RB	R4119	8x20AWG	5.4	57	37.2	75.0
SAS0205HBSXH-RB	R4016	2x18AWG	4.0	27	22.9	95.0
SAS0305HBSXX-RB	R4017	3x18AWG	4.2	36	22.9	90.0
SAS0405HBSXX-RB	R4018	4x18AWG	4.6	45	22.9	75.0
SAS0505HBSXX-RB	R4019	5x18AWG	4.8	45	22.9	75.0
SAS0705HBSXX-RB	R4021	6x18AWG	5.0	55	22.9	75.0
SAS0605HBSXX-RB	R4020	6x18AWG	5.5	64	22.9	75.0
SAS0805HBSXX-RB	R4022	8x18AWG	6.0	72	22.9	75.0
SAS0203HBSXH-RB	R4171	2x16AWG	4.7	81	15.5	105.0
SAS0303HBSXX-RB	R4173	3x16AWG	5.0	49	15.5	105.0
SAS0403HBSXX-RB	R4175	4x16AWG	5.4	62	15.5	90.0
SAS0603HBSXX-RB	R4177	6x16AWG	6.5	88	15.5	80.0
SAS0803HBSXX-RB	R4179	8x16AWG	7.2	114	15.5	80.0
SAS0201HBSXH-RB	R4161	2x14AWG	5.6	54	9.3	105.0
SAS0301HBSXX-RB	R4163	3x14AWG	5.9	75	9.3	100.0
SAS0401HBSXX-RB	R4165	4x14AWG	6.5	96	9.3	98.0
SAS0601HBSXX-RB	R4167	6x14AWG	7.9	139	9.3	96.0
SAS0801HBSXX-RB	R4169	8x14AWG	8.7	180	9.3	95.0
SAS0252HBSXH-RB	R4123	2x12AWG	6.8	82	5.7	105.0
SAS0352HBSXX-RB	R4124	3x12AWG	7.2	115	5.7	105.0
SAS0452HBSXX-RB	R4125	4x12AWG	8.0	149	5.7	100.0
SAS0652HBSXX-RB	R4127	6x12AWG	9.7	217	5.7	100.0
SAS0852HBSXX-RB	R4128	8x12AWG	10.8	284	5.7	100.0



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

Screened multi-conductor cable with a PVC or LSZH(FRNC) sheath are suitable for Building Management Systems (BMS), Sound, Audio, Security, Safety, Control and Instrumentation



CONSTRUCTION

Formation:

Tinned copper wire, Stranded

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outher Sheath:

Polyvinyl Chloride - PVC

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outher Sheath:

Grey - PVC

Violet - LSZH(FRNC)

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF CORES

3 cores: ● ● ○

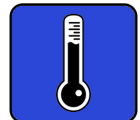
TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R_____ - AUDIO CONTROL & INSTRUMENTATION CABLE 3C 22AWG SCREENED LSF 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + BATCH + METER MARKING

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 25 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Building Management Systems Cable



Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt



AUDIO, CONTROL & INSTRUMENTATION

MULTI-CONDUCTOR CABLE

Multi Conductor Cables 22 to 18 AWG Screened PVC or LSZH(FRNC) Sheath 3 Cores

Cable with PE/SCREEN/PVC

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAS0305HBADX-T-RB	R1225	3x18AWG	6.0	56	23.2	75.0
SAS0306HBADX-T-RB	R1245	3x20AWG	4.9	39	38.5	75.0
SAS0307HBADX-T-RB	R1215	3x22AWG	4.7	32	57.4	75.0

Cable with PE/SCREEN/LSZH(FRNC)

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAS0305HXEDX-T-RB	R1410	3x18AWG	6.0	36	23.2	80.0
SAS0306HXEDX-T-RB	R1411	3x20AWG	4.9	57	38.5	80.0
SAS0307HXEDX-T-RB	R1412	3x22AWG	4.7	83	57.4	80.0



RS-232

Hand shake interface used for low data rates. Computer to printer or to modem or to other device. Max. speed 19.2 kbit/sec. Max. distance acc. to standard 15 m. Cables used are 6 to 25 conductors. Long distance transmission requires low capacitance (standard calls for 2500 pF link), No impedance specified.

RS-422

Balanced digital circuit. Medium speed data exchange. Long line modems and Daisy chain configuration. Maximum transmission speed 10 Mbit/second (normal use under 1Mbit/sec). Max. transmission distance is 1200 metres. Ten nodes per bus. Cables used have mainly 24AWG conductors, two twisted pairs or multi-pair and Impedance of 100 Ohm.

RS-485

Balanced digital circuit. Medium speed fieldbus interfaces. Maximum transmission speed 35 Mbit/second (normal use 1 or 0.5 Mbit/sec). Max. transmission distance is 1200 metres, 32 nodes per bus. Cables used have mainly 24AWG conductors, one twisted pair or multi-pair and impedance of 120 Ohm.

KNX

Is a standardised (EN 50090, ISO/IEC 14543), OSI-based network communications protocol for intelligent buildings. KNX is the successor to, and convergence of, three previous standards: the European Home Systems Protocol (EHS), Bati-BUS, and the European Installation Bus (EIB or Instabus).

Category LAN

Ethernet cables are grouped into sequentially numbered categories ("cat") based on different specifications; sometimes the category is updated with further clarification or testing standards LonWorks is a networking platform specifically created to address the needs of control applications. The platform is built on a protocol created by Echelon Corporation for networking devices over media such as twisted pair, power lines, fibre optics, and RF. It is used for the automation of various functions within buildings such as lighting and HVAC.

M-Bus (Meter-Bus)

is a European standard (EN 13757-2 physical and link layer, EN 13757-3 application layer) for the remote reading of gas or electricity meters. M-Bus is also usable for other types of consumption meters.

BACnet

is a communications protocol for building automation and control networks. It is was designed to allow communication of building automation and control systems for applications such as heating, ventilation, air-conditioning, lighting, access, and fire detection systems and their associated equipment. BACnet over IP can utilize Cat 6.

Modbus

is a serial communications protocol published by Modicon in 1979 for use with its programmable logic controllers (PLCs). Simple and robust, it has since become one of the de facto standard communications protocols in the industry.

DATA LAN CABLE

MULTI-CONDUCTOR CABLE

DATA LAN

RS-485 APPLICATIONS

Balanced digital circuit. Medium speed fieldbus interfaces. Maximum transmission speed 35 Mbit/second (normal use 1 or 0.5 Mbit/sec). Max. transmission distance is 1200 metres, 32 nodes per bus. Cables used have mainly 24AWG conductors, one twisted pair or multi-pair and impedance of 120 Ohm



CONSTRUCTION

Formation:

Tinned copper wire, Stranded

Insulation:

Solid Polyetilene - PE

Foam Polyetilene - FPE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Braiding:

Tinned copper wire braid

Outer Sheath:

Polyvinyl Chloride - PVC

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Grey - PVC

Violet - LSZH(FRNC)

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

1 pair:

2 pair:

3 pair:

4 pair:

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R_____ - DATA LAN CABLE - RS 485 - 1PR 24AWG SCREENED PVC

300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt



RS-485 APPLICATIONS

24AWG conductors, one twisted pair or multi-pair and impedance of 120 Ohm

Cable with 24AWG CONDUCTORS - FOAM PE/SCREEN (CAM+TCWB)/PVC

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAR0108HBADX-T-RB	R1189	1x2x24AWG	5.7	38	15.46	41.0
MAR0208HBADX-T-RB	R1190	2x2x24AWG	8.4	60	15.46	41.0
MAR0308HBADX-T-RB	R1191	3x2x24AWG	8.9	73	15.46	41.0
MAR0408HBADX-T-RB	R1192	4x2x24AWG	9.7	87	15.46	41.0

Cable with 24AWG CONDUCTORS - SOLID PE/SCREEN (CAM+TCWB)/LSZH(FRNC)

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAR0108HXEDX-T-RB	R1318	1x2x24AWG	5.6	36	15.46	41.0
MAR0208HXEDX-T-RB	R1319	2x2x24AWG	8.2	57	15.46	42.0
MAR0308HXEDX-T-RB	R1320	3x2x24AWG	8.7	69	15.46	42.0
MAR0408HXEDX-T-RB	R1321	4x2x24AWG	9.5	83	15.46	42.0

Cable with 22AWG CONDUCTORS - FOAM PE/SCREEN (CAM+TCWB)/PVC

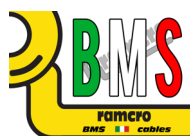
RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAR0107HBADX-T-RB	R1080	1x2x22AWG	6.4	48	73.1	36.0
MAR0207HBADX-T-RB	R1295	2x2x22AWG	9.8	76	73.1	37.0
MAR0307HBADX-T-RB	R1296	3x2x22AWG	10.4	93	73.1	38.0
MAR0407HBADX-T-RB	R1297	4x2x22AWG	11.4	113	73.1	38.0

Cable with 22AWG CONDUCTORS - SOLID PE/SCREEN (CAM+TCWB)/LSZH(FRNC)

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAR0107HXEDX-T-RB	R1401	1x2x22AWG	6.0	40	73.1	36.0
MAR0207HXEDX-T-RB	R1402	2x2x22AWG	9.1	66	73.1	37.0
MAR0307HXEDX-T-RB	R1403	3x2x22AWG	10.1	83	73.1	38.0
MAR0407HXEDX-T-RB	R1404	4x2x22AWG	11.0	100	73.1	38.0

Cable with 18AWG CONDUCTORS - SOLID PE/SCREEN (CAM+TCWB)/LSZH(FRNC)

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAR0105HXEDX-T-RB	R1405	1x2x18AWG	8.9	75	90.0	32.0
MAR0205HXEDX-T-RB	R1406	2x2x18AWG	11.5	111	90.0	35.0
MAR0305HXEDX-T-RB	R1407	3x2x18AWG	13.5	138	90.0	38.0
MAR0405HXEDX-T-RB	R1408	4x2x18AWG	14.8	194	90.0	38.0



DATA LAN

RS-422 APPLICATIONS

Balanced digital circuit. Medium speed data exchange. Long line modems and Daisy chain configuration. Maximum transmission speed 10 Mbit/second (normal use under 1Mbit/sec). Max. transmission distance is 1200 metres. Ten nodes per bus. Cables used have mainly 24AWG conductors, two twisted pairs or multi-pair and Impedance of 100 Ohm.



CONSTRUCTION

Formation:

Tinned copper wire, Stranded

Insulation:

Foam Polyethylene - FPE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Individual Screen:

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

Outer Sheath:

Polyvinyl Chloride - PVC

Colour Outer Sheath:

Grey

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

Pair 1: ●●●● Pair 4: ●●●●
Pair 2: ●●●● Pair 5: ●●●●
Pair 3: ●●●● Pair 6: ●●●●

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R_____ - DATA LAN CABLE - RS 422 - 2PR 24AWG IND. SCREENED PVC 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

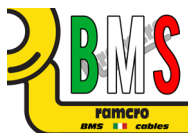
**Put up length 305 mt**

DATA LAN

RS-422 APPLICATIONS

24AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for RS-422 applications

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAP0208HBADX-T-RB	R1382	2x2x24AWG	7.2	42	88.0	41.0
MAP0308HBADX-T-RB	R1383	3x2x24AWG	8.3	61	88.0	41.0
MAP0408HBADX-T-RB	R1384	4x2x24AWG	9.2	76	88.0	41.0
MAP0608HBADX-T-RB	R1386	6x2x24AWG	10.5	105	88.0	41.0



DATA LAN

RS-232 APPLICATIONS

Hand shake interface used for low data rates. Computer to printer or modem or to the other device. Cables used are 4 to 25 conductors. Long distance transmission requires low capacitance (standard calls for 2500 pF link).

RAMCRO BMS



CONSTRUCTION

Formation:

Tinned copper wire, Stranded

Insulation:

Polyvinyl Chloride - PVC

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outher Sheath:

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outher Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

Pair 1: ●●●● Pair 5: ●●●●
Pair 2: ●●●● Pair 6: ●●●●
Pair 3: ●●●● Pair 7: ●●●●
Pair 4: ●●●● Pair 8: ●●●●

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R_____ - DATA LAN CABLE - RS 232 - 1PR 24AWG SCREENED PVC 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt



RS-232 APPLICATIONS

24AWG conductors – PVC/LSZH(FRNC) insulation – PVC or LSZH(FRNC) sheath for RS-232 applications

Cable with 24AWG CONDUCTORS - PVC/PVC

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAS0108HBAAH-T-RB	R1181	1x2x24AWG	3.7	21	88.0	135
MAS0208HBAAX-T-RB	R1182	2x2x24AWG	5.2	34	88.0	76
MAS0308HBAAX-T-RB	R1183	3x2x24AWG	5.5	41	88.0	76
MAS0408HBAAX-T-RB	R1184	4x2x24AWG	5.7	43	88.0	80
MAS0508HBAAX-T-RB	R1185	5x2x24AWG	6.5	52	88.0	80
MAS0608HBAAX-T-RB	R1186	6x2x24AWG	6.9	53	88.0	80
MAS0708HBAAX-T-RB	R1187	7x2x24AWG	6.9	59	88.0	80
MAS0808HBAAX-T-RB	R1188	8x2x24AWG	7.7	66	88.0	80

Cable with 24AWG CONDUCTORS - LSZH(FRNC)/LSZH(FRNC)

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAS0108HXEEH-T-RB	R1640	1x2x24AWG	3.7	16	88.0	135
MAS0208HXEEX-T-RB	R1641	2x2x24AWG	5.2	27	88.0	76
MAS0308HXEEX-T-RB	R1642	3x2x24AWG	5.5	33	88.0	76
MAS0408HXEEX-T-RB	R1643	4x2x24AWG	5.7	37	88.0	80
MAS0508HXEEX-T-RB	R1644	5x2x24AWG	6.5	45	88.0	80
MAS0608HXEEX-T-RB	R1645	6x2x24AWG	6.9	48	88.0	80
MAS0708HXEEX-T-RB	R1646	7x2x24AWG	6.9	54	88.0	80
MAS0808HXEEX-T-RB	R1647	8x2x24AWG	7.7	61	88.0	80

DATA LAN

MODBUS APPLICATIONS

Modbus is a serial communications protocol published by Modicon in 1979 for use with its programmable logic controllers (PLCs). Simple and robust, it has since become one of the factor standard communications protocols in the industry

RAMCRO BMS

CONSTRUCTION

Formation:

Tinned copper wire, Stranded

Insulation:

Polyethylene - PE

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Braiding:

Tinned copper wire braid

Outer Sheath:

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

Pair 1: ●●●● Pair 5: ●●●●
Pair 2: ●●●● Pair 6: ●●●●
Pair 3: ●●●● Pair 7: ●●●●
Pair 4: ●●●● Pair 8: ●●●●

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO ITALY - R_____ - DATA LAN CABLE - MODBUS - 2PR 22AWG IND. SCREENED PVC 300 V 75 C
IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up length 305 mt**

DATA LAN

MODBUS APPLICATIONS

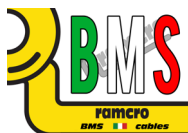
22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for MODBUS applications

Cable with 22AWG CONDUCTORS - PE/PVC

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAP0207HBADH-T-RB	R1196	2x2x22AWG	5.8	36	57.4	100
MAP0308HBADX-T-RB	R1197	3x2x22AWG	6.3	50	57.4	100
MAP0608HBADX-T-RB	R1214	6x2x22AWG	8.0	83	57.4	100

Cable with 24AWG CONDUCTORS - LSZH(FRNC)/LSZH(FRNC)

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAS0108HXEEH-T-RB	R1281	2x2x24AWG	6.3	47	57.4	150
MAS0208HXEEX-T-RB	R1282	3x2x24AWG	6.8	63	57.4	155
MAS0508HXEEX-T-RB	R1314	6x2x24AWG	9.3	110	57.4	155



DATA LAN

M-BUS APPLICATIONS

M-BUS (Meter-Bus) is a european standard (EN 13757-2) physical and lnk layer, EN 13757-3 application layer) for the remote reading of gas or electricity meters. M-Bus is also suitable for other types of consumption meters.

RAMCRO BMS

CONSTRUCTION

Formation:

Tinned copper wire, Stranded

Insulation:

Thermoplastic Low Smoke, Halogen Free - LSZH(FRNC)

Polyetilene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Outer Sheath:

Polyvinyl chloride - PVC

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Low Density Polyetilene - LDPE

Colour Outer Sheath:

Grey for PVC

Violet for LSZH (FRNC)

Black for LDPE

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

Pair 1: ● ○

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R____ - DATA LAN CABLE - M-BUS - 1PR 22AWG SCREENED PVC 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + BATCH + METER MARKING

ELECTRICAL DATA

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

M-BUS APPLICATIONS

24AWG and 12AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for M-BUS applications

Cable with PE/UNSCREENED/PVC

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MSE0107HBADN-T-RB	R1301	1x2x22AWG	3.9	19	57.40	70
MSE0106HBADN-T-RB	R1300	1x2x20AWG	4.2	24	35.75	70
MSE0105HBADN-T-RB	R1203	1x2x18AWG	4.8	32	22.70	70
MSE0103HBADN-T-RB	R1198	1x2x16AWG	6.6	58	15.47	50
MSE0101HBADN-T-RB	R1222	1x2x14AWG	8.4	91	9.3	108
MSE0152HBADN-T-RB	R1302	1x2x12AWG	9.5	110	5.9	115

Cable with LSZH/UNSCREENED/LSZH

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MSE0107HXEEN-T-RB	R1311	1x2x22AWG	3.3	14	57.40	85
MSE0106HXEEN-T-RB	R1309	1x2x20AWG	3.5	17	35.75	80
MSE0105HXEEN-T-RB	R1271	1x2x18AWG	3.9	24	22.70	80
MSE0103HXEEN-T-RB	R1307	1x2x16AWG	4.6	33	15.47	75
MSE0101HXEEN-T-RB	R1306	1x2x14AWG	5.5	51	9.3	75
MSE0152HXEEN-T-RB	R1304	1x2x12AWG	6.7	78	5.9	75

Cable with PE/UNSCREENED/LDPE

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MSE0107HEDDN-T-RB	R1879	1x2x22AWG	4.2	14	57.40	70
MSE0106HEDDN-T-RB	R1878	1x2x20AWG	5.0	19	35.75	70
MSE0105HEDDN-T-RB	R1874	1x2x18AWG	5.5	25	22.70	70
MSE0103HEDDN-T-RB	R1872	1x2x16AWG	7.3	45	15.47	50
MSE0101HEDDN-T-RB	R1876	1x2x14AWG	8.4	66	9.3	108
MSE0152HEDDN-T-RB	R1880	1x2x12AWG	9.5	94	5.9	115

DATA LAN

M-BUS APPLICATIONS

24AWG and 22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for M-BUS applications



CONSTRUCTION

Formation:

Tinned copper wire, Stranded

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Braiding:

Tinned copper wire braid

Outer Sheath:

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

Pair 1: ● ○

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R____ - DATA LAN CABLE - M-BUS - 1PR 22AWG UNSCREENED PVC 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt



M-BUS APPLICATION

24AWG and 12AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for M-BUS applications

Cable with 24AWG CONDUCTORS - PE/SCREENED/PVC

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAS0107HBADN-T-RB	R1199	1x2x22AWG	4.3	25	57.40	75.0
MAS0106HBADN-T-RB	R1195	1x2x20AWG	5.1	31	35.75	75.0
MAS0105HBADN-T-RB	R1193	1x2x18AWG	5.5	42	22.70	75.0
MAS0103HBADN-T-RB	R1213	1x2x16AWG	7.5	69	15.47	60.0
MAS0101HBADN-T-RB	R1224	1x2x14AWG	8.5	94	9.3	76.0
MAS0152HBADN-T-RB	R1313	1x2x12AWG	9.3	115	5.9	77.0

Cable with 24AWG CONDUCTORS - LSZH/SCREENED/LSZH

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
MAS0107HXEEN-T-RB	R1310	1x2x22AWG	3.4	17	57.40	130.0
MAS0106HXEEN-T-RB	R1308	1x2x20AWG	3.6	20	35.75	128.0
MAS0105HXEEN-T-RB	R1272	1x2x18AWG	4.0	27	22.70	125.0
MAS0103HXEEN-T-RB	R1270	1x2x16AWG	4.7	36	15.47	120.0
MAS0101HXEEN-T-RB	R1305	1x2x14AWG	5.6	54	9.3	120.0
MAS0152HXEEN-T-RB	R1303	1x2x12AWG	6.8	81	5.9	120.0

Cable with 24AWG CONDUCTORS - PE/SCREENED/LDPE

RAMRRO RODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANRE AT 20°R [Ohm/km]	NOM. RAPARITANRE [pF/m]
MAS0107HEDDN-T-RB	R1881	1x2x22AWG	4.3	19	57.40	75.0
MAS0106HEDDN-T-RB	R1877	1x2x20AWG	5.1	25	35.75	75.0
MAS0105HEDDN-T-RB	R1875	1x2x18AWG	5.5	36	22.70	75.0
MAS0103HEDDN-T-RB	R1870	1x2x16AWG	7.5	58	15.47	60.0
MAS0101HEDDN-T-RB	R1871	1x2x14AWG	8.5	78	9.3	76.0
MAS0152HEDDN-T-RB	R1873	1x2x12AWG	9.3	105	5.9	77.0

DATA LAN

LONWORKS APPLICATIONS

22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for LONWORKS applications



CONSTRUCTION

Formation:

Tinned copper wire, Solid

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Braiding:

Tinned copper wire braid

Outer Sheath:

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228


- IEC 60332-1 for PVC sheath


- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

Pair 1: 

Pair 2: 

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R_____ - DATA LAN CABLE - LONWORKS - 1PR 22AWG SCREENED PVC 300 V 75 C IEC 60332-1/UL 1581 - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt



DATA LAN

LONWORKS APPLICATIONS

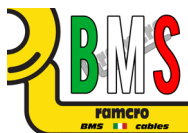
22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for LONWORKS applications

Cable with 24AWG CONDUCTORS - PE/UNSCREENED/LSZH(FRNC)

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SSR0107HXEDX-RB	R1346	1x2x22AWG	3.2	13	57.4	46.0
SSR0107HXEDX-RB	R1347	2x2x22AWG	5.0	24	57.4	46.0

Cable with 24AWG CONDUCTORS - PE/SCREENED/LSZH(FRNC)

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAM0107HXEDX-RB	R1348	1x2x22AWG	4.9	33	57.4	46.0
SAM0207HXEDX-RB	R1349	2x2x22AWG	8.0	72	57.4	46.0



DATA LAN

KNX or GENERAL BUS APPLICATIONS

0.8 mm conductors – PE insulation – PVC or LSZH(FRNC) sheath for EIB applications



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

1 Core: ●

2 Core: ●

3 Core: ○

4 Core: ●

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO ITALY - R____ - EIB CABLE 4x0.8mm SCREENED LSZH (FRNC) - - RAMCRO CODE - "PROD. WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

DATA LAN

KNX or GENERAL BUS APPLICATIONS

0.8 mm conductors – PE insulation – PVC or LSZH(FRNC) sheath for EIB applications

Cable with 24AWG CONDUCTORS - PE/SCREEN/PVC

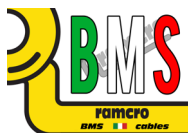
RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAM0108HIADH-RB	R1219	1x2x24AWG	5.1	38	37.0	100.0
SAM4108HIADX-RB	R1217	1x4x24AWG	5.7	53	37.0	100.0

Cable with 24AWG CONDUCTORS - PE/SCREEN/LSZH(FRNC)

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAM0108HIEDH-RB	R1220	1x2x24AWG	5.1	36	37.0	100.0
SAM4108HIEDX-RB	R1218	1x4x24AWG	5.7	51	37.0	100.0

Cable with 24AWG CONDUCTORS - PE/SCREEN/PE

RAMRRO RODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANRE AT 20°R [Ohm/km]	NOM. RAPARITANRE [pF/m]
SAM0108HIDDH-RB	R1901	1x2x24AWG	5.1	48	37.0	100.0
SAM4108HIDDX-RB	R1900	1x4x24AWG	5.7	33	37.0	100.0



DATA LAN

Cat. 3

CAT3



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

1 pair:

2 pair:

3 pair:

4 pair:

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R____ - DATA LAN CABLE 4 PAIRS UTP CAT 3 RAMCRO CODE - "PROD.WEEK/YEAR" -
MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt



DATA LAN

Cat3

CAT3

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
CAT3-2P-RB	R1031	2x2x24AWG	3.6	16	96.0	66
CAT3-6P-RB	R1266	6x2x24AWG	5.5	39	96.0	66
CAT3-12P-RB	R1267	12x2x24AWG	7.4	73	96.0	66
CAT3-25P-RB	R1032	25x2x24AWG	11.8	154	96.0	66
CAT3-50P-RB	R1033	50x2x24AWG	15.5	280	96.0	66
CAT3-100P-RB	R1034	100x2x24AWG	21.6	530	96.0	66
CAT3-150P-RB	R1268	150x2x24AWG	26.8	800	96.0	66
CAT3-200P-RB	R1269	200x2x24AWG	29.4	1040	96.0	66

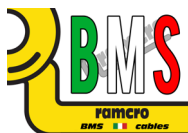
TECHNICAL PERFORMANCE

FREQUENCY [MHz]	MAX. ATTENUATION [dB/100m]	MAX. NEXT [dB]	MIN. RETURN LOSS [dB]	IMPEDANCE [Ohm]
1	2.6	41.3	12.0	100 ± 15
4	5.6	32.3	12.0	100 ± 15
8	8.5	27.8	12.0	100 ± 15
10	9.7	26.3	12.0	100 ± 15
16	13.1	23.3	12.0	100 ± 15

COLOR CODE

PAIR N°	PAIR COLOR	PAIR N°	PAIR COLOR	PAIR N°	PAIR COLOR
1	WHITE/BLUE	10	RED/GREY	19	YELLOW/BROWN
2	WHITE/ORANGE	11	BLACK/BLUE	20	YELLOW/GREY
3	WHITE/GREEN	12	BLACK/ORANGE	21	PURPLE/BLUE
4	WHITE/BROWN	13	BLACK/GREEN	22	PURPLE/ORANGE
5	WHITE/GREY	14	BLACK/BROWN	23	PURPLE/GREEN
6	RED/BLUE	15	BLACK/GREY	24	PURPLE/BROWN
7	RED/ORANGE	16	YELLOW/BLUE	25	PURPLE/GREY
8	RED/GREEN	17	YELLOW/ORANGE		
9	RED/BROWN	18	YELLOW/GREEN		

* Each group of 25 pairs, have a different color of numbered tapes



DATA LAN

FTP UTP 5e

FTP UTP 5e



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath


- IEC 60754-1&2 for LSZH(FRNC) sheath


- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

1 pair: 

2 pair: 

3 pair: 

4 pair: 

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO ITALY - R____ - DATA LAN CABLE 4 PAIRS UTP CAT.5 24AWG PVC 500 MHz ISO/IEC 11801 ANSI/TIA/EIA-568 C2 IEC 60332-1/UL 1685 - RAMCRO CODE - "PROD.WEEK/YEAR" + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

DATA LAN

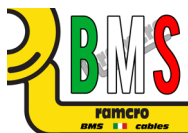
FTP UTP 5e

FTP / UTP 5e

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
UTPLEVEL5-4X2X0.22-RB	R1035	U-UTP	PVC	5.0	30	93.8
UTPLEVEL5-4X2X0.22ZA-RB	R1235	U-UTP	PVC	5.0	29	93.8
FTPLEVEL54X2X0.22-RB	R1036	U-FTP	LSZH(FRNC)	6.3	42	93.8
FTPLEVEL54X2X0.22ZA-RB	R1236	U-FTP	LSZH(FRNC)	6.3	43	93.8

TECHNICAL PERFORMANCE

FREQUENCY [MHz]	MIN.RETURN LOSS [dB/100m]	MAX. ATTENUATION [dB]	MIN. NEXT [dB]	MAX. TIME DELAY [ns/100m]	MAX. PSNEXT [dB]	MIN. ELFEXT [dB]	MIN. PSELFEXT [dB]
1	20.0	2.0	65.3	570.00	62.3	64.0	61.0
4	23.0	4.1	56.3	552.00	53.3	52.0	49.0
8	24.5	5.8	51.8	546.73	48.8	45.9	42.9
10	25.0	6.5	50.3	545.38	47.3	44.0	41.0
16	25.0	8.2	47.2	543.00	44.4	39.9	36.9
20	25.0	9.3	45.8	542.05	42.8	38.0	35.0
25	24.3	10.4	44.3	541.20	41.3	35.8	33.0
31.25	23.6	11.7	42.9	540.44	39.9	34.1	31.1
62.5	21.5	17.0	38.4	538.55	35.4	28.1	25.1
100	20.1	22.0	35.3	537.60	32.3	24.0	21.0



DATA LAN

FTP UTP 6

24AWG and 22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for RS-485 applications



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath


- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

1 pair: 

2 pair: 

3 pair: 

4 pair: 

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R____ - DATA LAN CABLE 4 PAIRS UTP CAT.6 23AWG PVC 500 MHz ISO/IEC 11801 ANSI/TIA/EIA-568 C2 IEC 60332-1/UL 1685 - RAMCRO CODE - "PROD.WEEK/YEAR" + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

DATA LAN

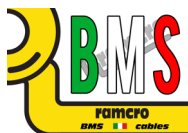
FTP UTP 6

FTP / UTP 6

RAMCRO CODE	PART N°	TYPE	SHEATH	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
UTPLEVEL6-4X2X0.22-RB	R1037	U-UTP	PVC	6.2	42	93.8
UTPLEVEL6-4X2X0.22ZA-RB	R1237	U-UTP	LSZH(FRNC)	6.2	42	93.8
FTPLEVEL64X2X0.22-RB-RB	R1038	U-FTP	PVC	7.4	56	93.8
FTPLEVEL64X2X0.22ZA-RB-RB	R1238	U-FTP	LSZH(FRNC)	7.4	54	93.8

TECHNICAL PERFORMANCE

FREQUENCY [MHz]	MIN.RETURN LOSS [dB/100m]	MAX. ATTENUATION [dB]	MIN. NEXT [dB]	MAX. TIME DELAY [ns/100m]	MAX. PSNEXT [dB]	MIN. ELFEXT [dB]	MIN. PSELFEXT [dB]
1	20.0	2.0	74.3	570.00	72.3	67.8	64.8
4	23.0	3.8	65.3	552.00	63.3	55.8	52.8
8	24.5	5.3	60.8	546.73	58.8	49.7	46.7
10	25.0	6.0	59.3	545.38	57.3	47.8	44.8
16	25.0	7.6	56.2	543.00	54.2	43.7	40.7
20	25.0	8.5	54.8	542.05	52.8	41.8	38.8
25	24.3	9.5	53.3	541.20	51.3	39.8	36.8
31.25	23.6	10.7	51.9	540.44	49.9	37.9	34.9
62.5	21.5	15.4	47.4	538.55	45.4	31.9	28.9
100	20.1	19.8	44.3	537.80	42.3	27.8	24.8
200	18.0	29.0	39.8	536.54	37.8	21.8	18.8
250	17.3	32.8	38.3	536.27	36.3	19.8	16.8



DATA LAN

FTP UTP 6A

24AWG and 22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for RS-485 applications



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

1 pair: 

2 pair: 

3 pair: 

4 pair: 

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R____ - DATA LAN CABLE 4 PAIRS UTP CAT.6A 23AWG PVC 500 MHz ISO/IEC 11801 ANSI/TIA/EIA-568 C2 IEC 60332-1/UL 1685 - RAMCRO CODE - "PROD.WEEK/YEAR" + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

DATA LAN

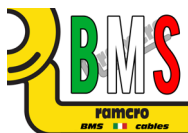
FTP UTP 6A

FTP / UTP 6A

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
UTPLEVEL6A4X2X0.22-RB	R1055	U-UTP	PVR	7.0	160	93.8
UTPLEVEL6A4X2X0.22ZA-RB	R1200	U-UTP	LSZH(FRNR)	7.0	155	93.8
FTPLEVEL6A4X2X0.22-RB	R1056	F-UTP	PVR	7.2	200	76.9
FTPLEVEL6A4X2X0.22ZA-RB	R1052	F-UTP	LSZH(FRNR)	7.2	196	76.9
UFTPLEVEL6A4X2X0.22-RB	R1057	U-FTP	PVR	7.8	210	76.9
UFTPLEVEL6A4X2X0.22ZA-RB	R1053	U-FTP	LSZH(FRNR)	7.8	206	76.9

TECHNICAL PERFORMANCE

FREQUENCY [MHz]	MIN.RETURN LOSS [dB/100m]	MAX. ATTENUATION [dB]	MIN. NEXT [dB]	MAX. TIME DELAY [ns/100m]	MAX. PSNEXT [dB]	MIN. ELFEXT [dB]	MIN. PSELFEXT [dB]
1	20.0	3.7	74.3	72.3	55.9	100 ± 15	61.0
10	25.0	5.8	59.3	57.3	47.8	100 ± 15	49.0
31.25	23.6	10.4	51.9	49.9	37.9	100 ± 15	42.9
100	20.1	19.0	44.3	42.3	27.8	100 ± 15	41.0
300	17.3	34.2	37.1	35.1	18.1	100 ± 25	36.9
500	17.3	45.2	33.8	31.8	14.0	100 ± 15	35.0



DATA LAN

CAT 7

24AWG and 22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for RS-485 applications



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath


- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

1 pair: 

2 pair: 

3 pair: 

4 pair: 

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO ITALY - R____ - DATA LAN CABLE 4 PAIRS S/FTP CAT.7 23AWG PVC 500 MHz ISO/IEC 11801 ANSI/TIA/EIA-568 C2 IEC 60332-1/UL 1685 - RAMCRO CODE - "PROD.WEEK/YEAR" + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

DATA LAN

CAT 7

Cat 7

RAMCRO CODE	PART N°	TYPE	SHEATH	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SFTPLEVEL7-RB	R1039	S-FTP	LSZH(FRNC)	7.8	68	57.9

TECHNICAL PERFORMANCE

FREQUENCY [MHz]	IMPEDANCE [OHM]	MIN. RETURN LOSS [dB/100m]	MAX. ATTENUATION [dB/100m]	MIN. NEXT [dB]	MIN. PSNEXT [dB]	MIN. ELFEXT [dB]	MIN. PSELFEXT [dB]
1	100 ± 15	20.0	2.0	80	75	78	75
4	100 ± 15	23.0	3.7	80	75	78	75
10	100 ± 15	25.0	5.9	80	75	74	71
16	100 ± 15	25.0	7.4	80	75	70	67
20	100 ± 15	25.0	8.3	80	75	68	65
31.25	100 ± 15	23.6	10.4	80	75	64	61
62.5	100 ± 15	21.5	14.9	75.5	72.5	58	55
100	100 ± 15	20.1	19.0	72.4	69.4	64	51
200	100 ± 25	17.3	27.5	67.9	64.9	48	45
250	100 ± 25	17.3	31.0	66.5	63.5	46	43
300	100 ± 25	17.3	34.2	61.9	62.2	40	37
600	100 ± 25	17.3	50.1	60.8	57.7	38	35



DATA LAN

CAT 7a

24AWG and 22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for RS-485 applications



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- (BS) EN 50290-2

- IEC 60228

- IEC 60332-1 for PVC sheath

- IEC 60332-3-24 for LSZH(FRNC) sheath

- IEC 60754-1&2 for LSZH(FRNC) sheath

- IEC 61034 for LSZH(FRNC) sheath

IDENTIFICATION OF PAIR

1 pair: 

2 pair: 

3 pair: 

4 pair: 

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R____ - DATA LAN CABLE 4 PAIRS S/FTP CAT.7A 23AWG PVC 500 MHz ISO/IEC 11801 ANSI/TIA/EIA-568 C2 IEC 60332-1/UL 1685 - RAMCRO CODE - "PROD.WEEK/YEAR" + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

DATA LAN

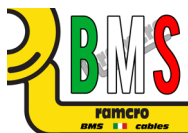
CAT 7a

Cat 7a

RAMCRO CODE	PART N°	TYPE	SHEATH	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANRE AT 20°R [Ohm/km]
SFTPLEVEL7A-RB	R1201	S-FTP	LSZH(FRNR)	7.8	68	

TECHNICAL PERFORMANCE

FREQUENCY [MHz]	IMPEDANCE [OHM]	MIN. RETURN LOSS [dB/100m]	MAX. ATTENUATION [dB/100m]	MIN. NEXT [dB]	MIN. PSNEXT [dB]	ACFR
4	100 ± 15	23.0	3.7	80.0	77.0	78.0
10	100 ± 15	25.0	5.9	80.0	77.0	74.3
16	100 ± 15	25.0	7.3	80.0	77.0	72.8
20	100 ± 15	25.0	8.2	80.0	77.0	71.9
31.25	100 ± 15	23.6	10.3	80.0	77.0	69.9
62.5	100 ± 15	21.5	14.6	80.0	77.0	60.6
100	100 ± 15	20.1	18.5	78.4	75.4	53.9
300	100 ± 15	17.3	32.7	71.2	68.2	38.6
600	100 ± 25	17.3	47.1	66.7	63.7	19.6
800	100 ± 25	17.3	54.9	64.9	61.9	9.93
1000	100 ± 25	16.0	61.9	63.4	60.4	1.47



Coaxial cables are designed to carry radio frequency signals of a much higher frequency than the 50 or 60 Hz used in low voltage cables. This requires special construction to prevent power losses. If an ordinary wire is used to carry high frequency signals, the wire acts as an antenna, and the high frequency signals radiate off the wire as radio waves, causing power losses. To prevent this, in coaxial cable one of the conductors is formed into a tube and encloses the other conductor. This confines the radio waves from the central conductor to the space inside the tube. To prevent the outer conductor, or shield, from radiating, it is connected to electrical ground, keeping it at a constant potential. The dimensions and spacing of the conductors must be uniform throughout the length of the cable. Any abrupt change in the spacing of the two conductors along the cable tends to reflect radio frequency power back toward the source. This acts as a bottleneck, reducing the amount of power reaching the destination end of the cable.

Most coaxial cables for video applications have a nominal impedance of 75 ohms.

Their differing electrical and physical characteristics make it important to select the correct type of cable to suit the application.

COAXIAL CABLE

RG59 - RG6 - RG11

COAXIAL CABLE

RG59 - RG6 - RG11

24AWG and 22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for RS-485 applications



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- IEC 61196
- (BS) EN 50117
- IEC 61034 (Low Smoke)
- IEC 60754-1&2 (Halogen Free)
- IEC 60332-3-24 LSZH(FRNC)
- (BS) EN 50290-2
- RoHS directives

IDENTIFICATION OF CORE

1 Core: ○

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO ITALY - R_____ - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

COAXIAL CABLE

RG59 - RG6 - RG11

Coaxial Cable

PHYSICAL CHARACTERISTICS

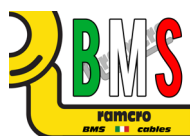
RAMCRO CODE	PART N°	CABLE TYPE	NOM.DIELECTRIC DIAMETER [mm]	COVERAGE BRAID [%]	MATERIAL SHEATH	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]
RG59-RB	R1028	RG59	3.7	95	PVC	6.0	47
RG59-ZA-RB	R1428	RG59	3.7	95	LSZH(FRNC)	6.0	49
RG6-RB	R1029	RG6	4.6	95	PVC	6.8	55
RG6-ZA-RB	R1429	RG6	4.6	95	LSZH(FRNC)	6.8	58
RG11-RB	R1030	RG11	7.1	90	PVC	10.0	115
RG11-ZA-RB	R1430	RG11	7.1	90	LSZH(FRNC)	10.0	120

GENERAL CHARACTERISTICS

CABLE TYPE	CONDUCTOR SIZE [mm]	MAX RESISTANCE AT 20°C [Ohm/km]	MAX RESISTANCE AT 20°C SCREEN [Ohm/km]	MIN.RETURN LOSS 1 TO 1000 MHz [dB]	IMPEDANCE [OHM]	CAPACITANCE [pF/m]
RG59	0.81	33.5	10.1	20	75 ± 3	53.5
RG6	1.02	21.5	10.8			53.5
RG11	1.63	8.8	6.5			52.8

NOMINAL ATTENUATION IN dB/100 m

MHz	5	10	50	100	200	300	400	450	550	700	750	870	1000
RG59	1.9	2.95	6.23	8.53	11.81	15.3	16.41	18.92	21.03	22.97	24.8	26.84	27.89
RG6	1.78	2.36	4.92	6.56	9.51	12.43	13.78	15.14	17.15	18.37	19.73	20.26	21.96
RG11	0.99	1.51	2.96	4.27	6.23	8.27	9.51	10.31	11.51	13.45	13.95	14.87	17.06



COAXIAL CABLE

RG59 - RG6 - RG11 FLEXIBLE

24AWG and 22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for RS-485 applications



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- IEC 61196
- (BS) EN 50117
- IEC 61034 (Low Smoke)
- IEC 60754-1&2 (Halogen Free)
- IEC 60332-3-24 LSZH(FRNC)
- (BS) EN 50290-2
- RoHS directives

IDENTIFICATION OF CORE

1 Core: ○

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO ITALY - R_____ - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

COAXIAL CABLE

RG59 - RG6 - RG11 FLEXIBLE

Coaxial Cable

PHYSICAL CHARACTERISTICS

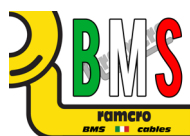
RAMCRO CODE	PART N°	CABLE TYPE	CONDUCTOR MATERIAL	NOM.DIELECTRIC DIAMETER [mm]	COVERAGE BRAID [%]	MATERIAL SHEATH	NOM. OUTER DIAMETER [mm]	WEIGHT [kg/km]
RG59-FLEX-RB	R1275	RG59	TINNED COPPER	3.7	95	PVC	6.0	48
RG6-FLEX-RB	R1276	RG6	BARE COPPER	4.6	95	PVC	6.8	57
RG11-FLEX-RB	R1277	RG11	BARE COPPER	7.1	90	PVC	10.0	118

GENERAL CHARACTERISTICS

CABLE TYPE	CONDUCTOR SIZE [mm]	MAX RESISTANCE AT 20°C [Ohm/km]	MAX RESISTANCE AT 20°C SCREEN [Ohm/km]	MIN.RETURN LOSS 1 TO 1000 MHz [dB]	IMPEDANCE [OHM]	NOM. CAPACITANCE [pF/m]
RG59	19x0.18	40.0	10.1	20	75 ± 3	53.5
RG6	19x0.22	30.0	10.8			53.5
RG11	19x0.34	8.8	6.2			52.8

NOMINAL ATTENUATION IN dB/100 m

MHz	5	10	50	100	200	300	400	450	550	700	750	870	1000
RG59	1.9	2.95	6.23	8.53	11.81	15.3	16.41	18.92	21.03	22.97	24.8	26.84	27.89
RG6	1.78	2.36	4.92	6.56	9.51	12.43	13.78	15.14	17.15	18.37	19.73	20.26	21.96
RG11	0.99	1.51	2.96	4.27	6.23	8.27	9.51	10.31	11.51	13.45	13.95	14.87	17.06



COAXIAL CABLE

RG59 - RG6 - RG11 QUAD SCREEN

24AWG and 22AWG conductors – PE insulation – PVC or LSZH(FRNC) sheath for RS-485 applications



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- IEC 61196
- (BS) EN 50117
- IEC 61034 (Low Smoke)
- IEC 60754-1&2 (Halogen Free)
- IEC 60332-3-24 LSZH(FRNC)
- (BS) EN 50290-2
- RoHS directives

IDENTIFICATION OF CORE

1 Core: ○

TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO ITALY - R_____ - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

COAXIAL CABLE

RG59 - RG6 - RG11 QUAD SCREEN

Coaxial Cable

PHYSICAL CHARACTERISTICS

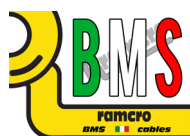
RAMCRO CODE	PART N°	CABLE TYPE	CONDUCTOR MATERIAL	NOM.DIELECTRIC DIAMETER [mm]	COVERAGE BRAID [%]	MATERIAL SHEATH	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]
RG59-QS-RB	R1025	RG59	TINNED COPPER	3.7	54 + 46	PVC	6.7	39
RG6-QS-RB	R1026	RG6	BARE COPPER	4.6	60 + 40	PVC	7.5	49
RG11-QS-RB	R1027	RG11	BARE COPPER	7.1	60 + 40	PVC	10.3	91

GENERAL CHARACTERISTICS

CABLE TYPE	CONDUCTOR SIZE [mm]	MAX RESISTANCE AT 20°C [Ohm/km]	MAX RESISTANCE AT 20°C SCREEN [Ohm/km]	MIN.RETURN LOSS 1 TO 1000 MHz [dB]	IMPEDANCE [OHM]	NOM. CAPACITANCE [pF/m]
RG59	0.81	146.5	10.1	20	75 ± 3	53.0
RG6	1.02	92.2	10.8			53.0
RG11	1.63	36.5	6.2			53.0

NOMINAL ATTENUATION IN dB/100 m

MHz	5	10	50	100	200	400	550	870	1250	1750	2150	2500	3000
RG59	2.92	3.45	5.40	8.21	12.56	16.01	19.36	24.74	30.62	36.71	40.82	44.72	48.64
RG6	2.2	2.48	5.15	6.6	9.56	13.12	15.45	19.69	24.25	29.26	32.88	35.88	39.83
RG11	1.25	2.03	3.75	5.01	6.85	8.10	9.65	12.6	16.66	20.28	22.93	25.12	28.08



COAXIAL CABLE

RG59 - RG6 - RG11 QUAD SCREEN

CATV: Central Antenna Television, Cable television is a system of providing television to consumers via radio frequency signals transmitted to televisions. Nowadays also used for internet and telephone.

SMATV: Satellite Master Antenna Television used to deliver signals to multiple dw

RAMCRO BMS

CONSTRUCTION

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyethylene - PE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Polyvinyl chloride - PVC

or

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Violet

STANDARD REFERENCES

- IEC 61196
- (BS) EN 50117
- IEC 61034 (Low Smoke)
- IEC 60754-1&2 (Halogen Free)
- IEC 60332-3-24 LSZH(FRNC)
- (BS) EN 50290-2
- RoHS directives

IDENTIFICATION OF CORE

1 Core: ○

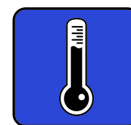
TEMPERATURE RANGE

During Operation:

-30° C up to +80° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMCRO ITALY - R_____ - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter

**Put up lenght 305 mt**

COAXIAL CABLE

RG59 - RG6 - RG11 QUAD SCREEN

Coaxial Cable

PHYSICAL CHARACTERISTICS

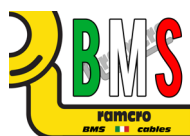
RAMCRO CODE	PART N°	CABLE TYPE	CONDUCTOR MATERIAL	NOM.DIELECTRIC DIAMETER [mm]	COVERAGE BRAID [%]	MATERIAL SHEATH	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]
RG59-QS-RB	R1256	RG59	TINNED COPPER	3.7	54 + 46	PVC	6.7	39
RG6-QS-RB	R1257	RG6	BARE COPPER	4.6	60 + 40	PVC	7.5	49
RG11-QS-RB	R1241	RG11	BARE COPPER	7.1	60 + 40	PVC	10.3	91

GENERAL CHARACTERISTICS

CABLE TYPE	CONDUCTOR SIZE [mm]	MAX RESISTANCE AT 20°C [Ohm/km]	MAX RESISTANCE AT 20°C SCREEN [Ohm/km]	MIN.RETURN LOSS 1 TO 1000 MHz [dB]	IMPEDANCE [OHM]	NOM. CAPACITANCE [pF/m]
RG59	0.81	146.5	10.1	20	75 ± 3	53.0
RG6	1.02	92.2	10.8			53.0
RG11	1.63	36.5	6.2			53.0

NOMINAL ATTENUATION IN dB/100 m

MHz	5	10	50	100	300	550	750	1000	2000	3000	4500
RG59	2.92	3.45	5.40	8.21	12.56	16.01	19.36	24.74	30.62	36.71	40.82
RG6	2.2	2.48	5.15	6.6	9.56	13.12	15.45	19.69	24.25	29.26	32.88
RG11	1.25	2.03	3.75	5.01	6.85	8.10	9.65	12.6	16.66	20.28	22.93



COAXIAL CABLE

RG59 - RG6 - RG11 QUAD SCREEN

High-definition television refers to video having resolution substantially higher than traditional television systems



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Foam Polyethylene - FPE

Collective Screen:

Bonded Aluminium/Aluminium-PETP tape

Outer Sheath:

Polyvinyl chloride - PVC

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Colour Outer Sheath:

Orange

STANDARD REFERENCES

- IEC 61196
- (BS) EN 50117
- IEC 61034 (Low Smoke)
- IEC 60754-1&2 (Halogen Free)
- IEC 60332-3-24 LSZH(FRNC)
- (BS) EN 50290-2
- RoHS directives

IDENTIFICATION OF CORE

1 Core: ○

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R_____ - RAMCRO CODE - "PROD.WEEK/YEAR" - MADE IN ITALY + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt



COAXIAL CABLE

RG59 - RG6 - RG11 QUAD SCREEN

Coaxial Cable

PHYSICAL CHARACTERISTICS

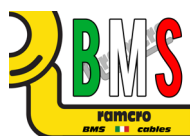
RAMCRO CODE	PART N°	CABLE TYPE	CONDUCTOR MATERIAL	NOM.DIELECTRIC DIAMETER [mm]	COVERAGE BRAID [%]	MATERIAL SHEATH	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]
RG59-FTC-RB	R1229	RG59	BARE COPPER	3.7	95	PVC	6.0	46
RG59-ZA-FTC-RB	R1279	RG59	BARE COPPER	3.7	95	LSZH(FRNC)	6.0	48
RG6-FTC-RB	R1280	RG6	BARE COPPER	4.6	95	PVC	6.8	56
RG6-ZA-FTC-RB	R1378	RG6	BARE COPPER	4.6	95	LSZH(FRNC)	6.8	59
RG11-FTC-RB	R1379	RG11	BARE COPPER	7.1	95	PVC	10.0	114
RG11-ZA-FTC-RB	R1380	RG11	BARE COPPER	7.1	95	LSZH(FRNC)	10.0	117

GENERAL CHARACTERISTICS

CABLE TYPE	CONDUCTOR SIZE [mm]	MAX RESISTANCE AT 20°C [Ohm/km]	MIN.RETURN LOSS 1 TO 1000 MHz [dB]				IMPEDANCE [OHM]	NOM. CAPACITANCE [pF/m]
			1 to 1000 MHz	1000 to 2000 MHz	2000 to 3000 MHz	3000 to 4500 MHz		
RG59	0.81	33.5	23	22	16	15	10.1	53.0
RG6	1.02	21.5	23	22	16	15	10.8	53.0
RG11	1.63	8.8	23	22	16	15	6.2	53.0

NOMINAL ATTENUATION IN dB/100 m

MHz	5	10	50	100	300	550	750	1000	2000	3000	4500
RG59	2.07	2.95	6.23	7.55	13.68	18.83	22.23	25.96	38.24	46.13	56.50
RG6	1.71	2.33	4.57	6.40	11.96	15.76	18.08	21.36	31.44	39.76	50.46
RG11	1.12	1.51	2.96	4.20	7.49	10.41	12.38	14.57	21.84	27.93	35.89



Power-limited Fire Alarm Cable

Power-limited circuits have relatively low voltage and current, which prevents them from producing damaging amounts of fault energy. As a result, power-limited circuits may have different and less stringent requirements concerning over-current protection, insulation, installation, and materials than non-power-limited circuits.

There are three types of power-limited fire alarm cables commonly used today.

These include FPLP, FPL, and FPLR cables. Respectively, these are plenum-rated, non-plenum rated, and riser-rated cables.

FPLR (Riser)

FPLR cables are rated for use in riser applications. This means they can be used in cable pathways that run vertically from floor to floor. These cables are listed by the National Electric Code as having fire-resistant characteristics which help prevent fire from spreading to multiple floors of the building. They also must pass UL test 1424 and the UL vertical riser test 1666.

This cable consists of a 22 to 12 AWG fully annealed, solid bare copper conductor, and premium-grade PVC insulation and jacketing. It is rated to 300 volts and has a temperature range of -20° C to 75° C. Common applications for this cable include fire alarm wiring, smoke alarms, voice communications, burglar alarms, and fire protective circuits. A polyester and aluminum foil shield with a stranded tinned copper drain wire is also an option for applications that require shielding.

FIRE ALARM CABLE

UL 1424

UL 1424

Multi-Core, PVC HT 105-Insulation, unscreened or with collective screen, Hi-Performance PVC-Sheath



CONSTRUCTION

Formation:
Plain annealed copper wire, Solid

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:
High Performance Polyvinyl chloride - Hi-PVC

Armour:
Galvanized steel wire armour - SWA

Outer Sheath:
High Performance Polyvinyl chloride - Hi-PVC

Colour Outer Sheath:
Red

STANDARD REFERENCES

- UL 1424 (FPRL Type)
- NEC Article 760
- NEC Article 725
- UL 1666
- ASTM D 1329
- NF C 32-020
- IRAM IAP
- EN 50266-2
- IEC 60332-1
- IEC 60332-3

IDENTIFICATION OF CORES

2 cores: ● ●

TEMPERATURE RANGE

During Operation:
-30° C up to +180°C

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



CABLE PRINTING

RAMCRO ITALY - R____ - E475091 (UL)FPLR - 2C 18AWG SHIELDED - FIRE ALARM CABLE 105°C
RAMCRO CODE + BATCH + METER MARKING - - - UL 1424 - UL 1666 - IEC 60332-1-3 - MADE IN ITALY

ELECTRICAL DATA

Insulation Resistance @ 20°C:
> 25 MOhm*Km

Test Voltage Core-Core:
2000 V

Test Voltage Core-Screen:
2000 V

Mutual Capacitance:
< 150 nF/km

Inductance:
< 1 mH/km

Operating Voltage:
300/500 V

CHARACTERISTICS

Min. Bending Radius
8 x cable diameter



Put up lenght 305 mt



UL 1424

FPLR

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAR0203HFOCH-UL-FA-RB	R1040	2x18AWG	3.3	20	34.0	150.0
SAR0202HFOCH-UL-FA-RB	R1041	2x16AWG	3.8	27	21.4	150.0
SAR0201HFOCH-UL-FA-RB	R1042	2x14AWG	4.1	38	13.5	150.0
SAR0252HFOCH-UL-FA-RB	R1043	2x12AWG	5.7	70	8.5	150.0

RAMRRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANRE AT 20°R [Ohm/km]	NOM. RAPARITANRE [pF/m]
SSR0203HFOCH-UL-FA-RB	R1136	2x18AWG	3.8	27	21.4	150.0
SSR0202HFOCH-UL-FA-RB	R1137	2x16AWG	4.1	38	13.5	150.0
SSR0201HFOCH-UL-FA-RB	R1138	2x14AWG	5.7	70	8.5	150.0
SSR0251HFOCH-UL-FA-RB	R1138	2x12AWG	6.5	90	5.3	150.0

Plenum Fire Alarm Cable (NEC Type FPLP)

NEC FPLP Plenum Fire Alarm Cable is available from Allied Wire in Cable in both shielded fire alarm cable and unshielded fire alarm cable versions. In our collection, we offer PVC and PVDF jacketed cables and mid-capacitance cables. All meet NEC Article 760 and FPLP standards. They are rated to 75°C and 300 volts. Our unshielded fire alarm cable may be consistently relied upon. Our shielded alarm cables are excellent products as well, as they offer protection against noise and other outside variables. Whether you choose a shielded or unshielded fire alarm cable, all are approved for plenum installation.

FPLP

FPLP shielded and unshielded fire alarm cable may be used for many applications, including the wiring of fire alarms, smoke detectors, voice communications, burglar alarms, fire protective circuits, pull boxes, addressable fire alarm systems and more. FPLP Alarm Cable features an abrasion, chemical and water resistant jacket. Sequentially marked footage is included to facilitate installation. For safer cable options, Allied Wire carries Plenum Fire Alarm Cable designed to meet NFPA 262 and CSA FT-6 Steiner Tunnel Fire Tests for Plenum Applications. All Plenum Fire Alarm Cable is also California State Fire Marshall approved.

PLENUM FIRE ALARM CABLE

Fire Protection, Alarm, Signal Cable

PLENUM FIRE ALARM CABLE

Fire Protection, Alarm, Signal Cable

Multi-Core, Fire Retardant PVC LS, unscreened or with collective screen, Fire Retardant PVC LS-Sheath



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Low Smoke Polyvinylchloride - LS PVC

Cable twisting:

Two or more wire twisted

Collective Screen:

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

Outer Sheath:

Low Smoke Polyvinylchloride - LS PVC

Colour Outer Sheath:

Red

STANDARD REFERENCES

- UL 1666
- NEC Article 760
- NFPA 262 (UL 910)
- CMP

IDENTIFICATION OF CORES

2 cores: ● ●

TEMPERATURE RANGE

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMCRO ITALY - R_____ - FIRE ALARM CABLE PLENUM - FPLP - UL 1666 2C 16AWG + BATCH + METER MARKING

ELECTRICAL DATA

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Min. Bending Radius

8 x cable diameter



Put up lenght 305 mt



PLENUM FIRE ALARM CABLE

Fire Protection, Alarm, Signal Cable

Multi-Core, Fire Retardant PVC LS, unscreened or with collective screen, Fire Retardant PVC LS-Sheath

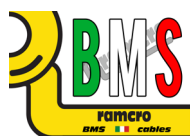
RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAR0203HESNX-UL-FA-RB	R9040	2x16AWG	4.4	54	21.4	150.0
SAR0202HESNX-UL-FA-RB	R9041	3x16AWG	4.7	73	21.4	150.0
SAR0201HESNX-UL-FA-RB	R9042	4x16AWG	5.2	111	21.4	150.0

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAR0205HESNX-UL-FA-RB	R9043	2x18AWG	3.8	36	34.0	150.0
SAR0205HESNX-UL-FA-RB	R9044	3x18AWG	4.1	127	34.0	150.0
SAR0205HESNX-UL-FA-RB	R9045	4x18AWG	4.6	133	34.0	150.0

Unscreened Version

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SSR0203HESNX-UL-FA-RB	R9046	2x16AWG	4.3	48	21.4	150.0
SSR0202HESNX-UL-FA-RB	R9047	3x16AWG	4.5	66	21.4	150.0
SSR0201HESNX-UL-FA-RB	R9048	4x16AWG	5.0	96	21.4	150.0

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SSR0205HESNX-UL-FA-RB	R9049	2x18AWG	3.6	28	34.0	150.0
SSR0205HESNX-UL-FA-RB	R9050	3x18AWG	4.0	101	34.0	150.0
SSR0205HESNX-UL-FA-RB	R9051	4x18AWG	4.5	123	34.0	150.0



These special multicore cables are used for fire resistant and circuit integrity, and essentially to prevent life from smoke and noxious fumes, and where sensitive equipment may be damaged by acid forming gases.

Materials and structure used for this type of cables depends on performance required:

Fire Time Exposition, Fire Temperature, Extra Burning Events.

These type of cables can be manufactured in according to:

- International Electro-Technical Commission IEC 60331
- British Standard BS 6387 C-W-Z
- British Standard BS 7629
- FireGround Cable BS 6387 C-W-Z - BS 7846

One of the major requirement of the Metro system concerns fire prevention.

Minimization of the combustible materials in tunnels and stations is an ever-developing topic as it indirectly dictates the time available for responding safely to a fire incident. Reduction of the combustible materials, development of fire resistant materials, development of materials that even when burned do not produce toxic fumes and other dangerous products may provide the additional critical time to safely evacuate the people/passengers involved in an incident.

Within this framework, arise the need that the cables installed in a Tunnel or Metro Network must have have the proper fire behavior and do not let the fire spread. Within this framework, Ramfirecro FIREGROUND have been designed.

All the cables can be order with a white sheath.

FIRE RESISTANT CABLE

MULTI-CONDUCTOR CABLE

FIRE RESISTANT CABLE

LPCB 568a/02

BS 6387:2013 Cat. C-W-Z

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath



CONSTRUCTION

Formation:

Plain annealed copper wire, solid and stranded

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

Major References Certified:

- BS 6387:2013 Cat. C-W-Z
- IEC 60754-1:2011
- IEC 60754-2:2011
- BS EN 61034-2:2005+A1:2013
- EN 50200:2015 (Class PH60)

Applicable Standard:

- BS EN 60228:2005
- BS 7655 6.1:1997
- IEC 60331-21
- IEC 60332-3-24C

IDENTIFICATION OF CORES

2 cores: ● ●
3 cores: ● ● ●
4 cores: ● ● ● ●
up/from 5 cores: Black Numbered

TEMPERATURE RANGE

During Operation:
-30° C up to +180°C
During Installation:
-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 - R_____ - FIRE RESISTANT - LSZH - LPCB 568a/02 - BS EN 50267-2-1 - BS 6387 C-W-Z - EN 50200 PH 120 - 300/500V -2x1,5 mmq + E + batch n° + MADE IN ITALY - RAMCRO B3 ITALY + metrica

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



BS 6387:2013 Cat. C-W-Z

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAR0211HFESL-F3(IE)-RB	R1283	2x1.00 (Cl.1)	6.4	60	18.5	150.0
SAS0210HFESL-F3(IE)-RB	R1140	2x1.00 (Cl.2)	7.1	63	18.5	150.0
SAR0311HFESP-F3(IE)-RB	R1160	3x1.00 (Cl.1)	6.8	78	18.5	150.0
SAS0310HFESP-F3(IE)-RB	R1150	3x1.00 (Cl.2)	7.1	81	18.5	150.0
SAR0214HFESL-F3(IE)-RB	R1044	2x1.50 (Cl.1)	7.3	77	12.3	150.0
SAS0215HFESL-F3(IE)-RB	R1141	2x1.50 (Cl.2)	7.6	81	12.3	150.0
SAR0314HFESP-F3(IE)-RB	R1161	3x1.50 (Cl.1)	7.7	100	12.3	150.0
SAS0315HFESP-F3(IE)-RB	R1151	3x1.50 (Cl.2)	8.1	107	12.3	150.0
SAR0218HFESL-F3(IE)-RB	R1045	2x2.50 (Cl.1)	8.5	106	7.6	150.0
SAS0225HFESL-F3(IE)-RB	R1142	2x2.50 (Cl.2)	8.9	112	7.6	150.0
SAR0318HFESP-F3(IE)-RB	R1162	3x2.50 (Cl.1)	9.0	142	7.6	150.0
SAS0325HFESP-F3(IE)-RB	R1152	3x2.50 (Cl.2)	9.5	150	7.6	150.0
SAS0240HFESL-F3(IE)-RB	R1289	2x4.00 (Cl.2)	10.0	149	4.7	150.0
SAS0340HFESP-F3(IE)-RB	R1163	3x4.00 (Cl.2)	10.6	205	4.7	150.0

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the part RAMCRO CODE will change in: SAR___HCESL-F3(IE)

BS 7629-1:2008

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath



CONSTRUCTION

Formation:

Plain annealed copper wire, solid

Insulation:

Special mix silicon rubber

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

Major References Certified:

- BS 7629-1:2008
 - IEC 60754-1:2011
 - IEC 60754-2:2011
 - BS EN 61034-2:2005+A1:2013
 - EN 50200:2015 (Class PH120)
- Applicable Standard:
- BS EN 60228:2005
 - BS 7655 6.1:1997
 - IEC 60331-21
 - IEC 60332-3-24C

IDENTIFICATION OF CORES

- 2 cores: ● ●
- 3 cores: ● ● ●
- 4 cores: ● ● ● ●
- up/from 5 cores: Black Numbered

TEMPERATURE RANGE

- During Operation:**
-30° C up to +180°C
- During Installation:**
-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 - R____ - FIRE RESISTANT ELECTRIC CABLE – LSZH - 300/500V - BS 7629-1:2008 - BS EN50200 PH30/120 - BS 6387 CWZ - 2x1,5 mmq + E - LPCB 568c/02 - MADE IN ITALY - BATCH N°

ELECTRICAL DATA

- Insulation Resistance @ 20°C:**
> 200 MOhm*Km
- Test Voltage Core-Core:**
2000 V
- Test Voltage Core-Screen:**
2000 V
- Mutual Capacitance:**
< 150 nF/km
- Inductance:**
< 1 mH/km
- Operating Voltage:**
300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



BS 7629-1:2008

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAR0211HFESL-F3PH120-RB	R1285	2x1.00 (Cl.1)	6.6	68	18.5	150.0
SAS0210HFESL-F3PH120-RB	R1046	2x1.00 (Cl.2)	6.9	71	18.5	150.0
SAR0311HFESP-F3PH120-RB	R1064	3x1.00 (Cl.1)	7.0	85	18.5	150.0
SAS0310HFESP-F3PH120-RB	R1065	3x1.00 (Cl.2)	7.3	88	18.5	150.0
SAR0214HFESL-F3PH120-RB	R1286	2x1.50 (Cl.1)	7.5	89	12.3	150.0
SAS0215HFESL-F3PH120-RB	R1047	2x1.50 (Cl.2)	8.0	98	12.3	150.0
SAR0314HFESP-F3PH120-RB	R1066	3x1.50 (Cl.1)	8.1	117	12.3	150.0
SAS0315HFESP-F3PH120-RB	R1067	3x1.50 (Cl.2)	8.5	123	12.3	150.0
SAR0218HFESL-F3PH120-RB	R1287	2x2.50 (Cl.1)	9.0	135	7.6	150.0
SAS0225HFESL-F3PH120-RB	R1048	2x2.50 (Cl.2)	9.4	141	7.6	150.0
SAR0318HFESP-F3PH120-RB	R1068	3x2.50 (Cl.1)	9.5	173	7.6	150.0
SAS0325HFESP-F3PH120-RB	R1069	3x2.50 (Cl.2)	10.0	180	7.6	150.0
SAS0240HFESL-F3PH120-RB	R1288	2x4.00 (Cl.2)	10.6	195	4.7	150.0
SAS0340HFESP-F3PH120-RB	R1070	3x4.00 (Cl.2)	11.2	251	4.7	150.0

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the part RAMCRO CODE will change in: SAR___HCESL-F3PH120

BS 6387:2013 Cat. C-W-Z

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Steel Wire Armour, LSZH-Sheath



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Special mix silicon rubber

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free

Armour:

Galvanized steel wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free

Colour Outer Sheath:

Red

STANDARD REFERENCES

Major References Certified:

- BS 6387:2013 Cat. C-W-Z
 - IEC 60754-1:2011
 - IEC 60754-2:2011
 - BS EN 61034-2:2005+A1:2013
 - EN 50200:2015 (Class PH60)
- Applicable Standard:
- BS EN 60228:2005
 - BS 7655 6.1:1997
 - IEC 60331-21
 - IEC 60332-3-24C

IDENTIFICATION OF CORES

- 2 cores: ● ●
- 3 cores: ● ● ●
- 4 cores: ● ● ● ●
- 5 cores: ● ● ● ● ●

TEMPERATURE RANGE

- During Operation:**
-30° C up to +180°C
- During Installation:**
-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 - R____ - LSZH – BS 6387 C-W-Z – IEC60332-3-24 – IEC 60332-1-2 – IEC 60502 - 0.6/1 kV 2x2.50 sqmm – CU/SIL/LSZH/SWA/LSZH – ARMoured - MADE IN ITALY + BATCH N°

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

5000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Power Cable

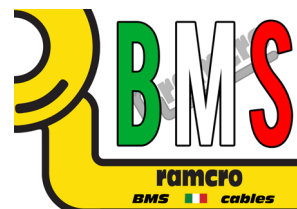


BS 6387:2013 Cat. C-W-Z

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Steel Wire Armour, LSZH-Sheath

RAMCRO CODE	PART N°	FORMATION [n° x AWG]	NOM. OUTER DIAMETER [mm]	NOM. WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]	NOM. CAPACITANCE [pF/m]
SAS0225AFESH-F3(FG)-RB	R7846	2x2.50	16.2*	521	8.1	150.0
SAS0375AFESP-F3(FG)-RB	R7847	3x2.50	16.8*	571	8.1	150.0
SAS0475AFESQ-F3(FG)-RB	R7848	4x2.50	17.8*	640	8.1	150.0
SAS0575AFESD-F3(FG)-RB	R7849	5x2.50	18.8*	714	8.1	150.0
SAS0210AFESL-F3(FG)-RB	R7850	2x4.00	17.1*	582	5.0	150.0
SAS0310AFESP-F3(FG)-RB	R7851	3x4.00	17.7*	644	5.0	150.0
SAS0410AFESQ-F3(FG)-RB	R7852	4x4.00	18.7*	728	5.0	150.0
SAS0510AFESD-F3(FG)-RB	R7853	5x4.00	19.9*	819	5.0	150.0
SAS0215AFESL-F3(FG)-RB	R7854	2x6.00	18.6*	703	3.4	150.0
SAS0315AFESP-F3(FG)-RB	R7855	3x6.00	19.4*	789	3.4	150.0
SAS0415AFESQ-F3(FG)-RB	R7856	4x6.00	20.6**	905	3.4	150.0
SAS0515AFESD-F3(FG)-RB	R7857	5x6.00	22.7**	1137	3.4	150.0
SAS0225AFESL-F3(FG)-RB	R7858	2x10.00	20.6**	891	1.9	150.0
SAS0325AFESP-F3(FG)-RB	R7859	3x10.00	22.2**	1130	1.9	150.0
SAS0425AFESQ-F3(FG)-RB	R7860	4x10.00	23.8**	1307	1.9	150.0
SAS0525AFESD-F3(FG)-RB	R7861	5x10.00	25.4**	1492	1.9	150.0
SAS0240AFESL-F3(FG)-RB	R7862	2x16.00	24.1**	1280	1.2	150.0
SAS0340AFESP-F3(FG)-RB	R7863	3x16.00	25.5**	1481	1.2	150.0
SAS0440AFESQ-F3(FG)-RB	R7864	4x16.00	27.1**	1737	1.2	150.0
SAS0540AFESD-F3(FG)-RB	R7865	5x16.00	29.3**	2021	1.2	150.0
SAS0240AFESL-F3(FG)-RB	R7866	2x25.00	26.1**	1593	0.9	150.0
SAS0340AFESP-F3(FG)-RB	R7867	3x25.00	27.4**	1886	0.9	150.0
SAS0440AFESQ-F3(FG)-RB	R7868	4x25.00	29.8**	2261	0.9	150.0
SAS0540AFESD-F3(FG)-RB	R7869	5x25.00	33.1**	2843	0.9	150.0

PART NUMBER INDEX

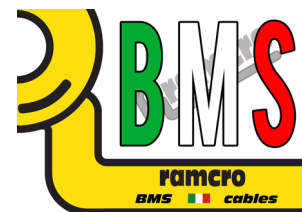


CABLE CODE	PART N°	BELDEN	PAGE
SAS0201HBAXH-RB	R1001	5100FE	9
SSS0201HBAXH-RB	R1002	5100UE	7
SAS0301HBAXX-RB	R1003	5101FE	9
SSS0301HBAXX-RB	R1004	5101UE	7
SAS0401HBAXX-RB	R1005	5102FE	9
SSS0401HBAXX-RB	R1006	5102UE	7
SAS0203HBAXH-RB	R1007	5200FE	9
SSS0203HBAXH-RB	R1008	5200UE	7
SAS0303HBAXX-RB	R1009	5201FE	9
SSS0303HBAXX-RB	R1010	5201UE	7
SAS0403HBAXX-RB	R1011	5202FE	9
SSS0403HBAXX-RB	R1012	5202UE	7
SAS0205HBAXH-RB	R1013	5300FE	9
SSS0205HBAXH-RB	R1014	5300UE	7
SAS0305HBAXX-RB	R1015	5301FE	9
SSS0305HBAXX-RB	R1016	5301UE	7
SAS0405HBAXX-RB	R1017	5302FE	9
SSS0405HBAXX-RB	R1018	5302UE	7
SAS0206HBAXH-RB	R1019	5400FE	9
SSS0206HBAXH-RB	R1020	5400UE	7
SAS0306HBAXX-RB	R1021	5401FE	9
SSS0306HBAXX-RB	R1022	5401UE	7
SAS0406HBAXX-RB	R1023	5402FE	9
SSS0406HBAXX-RB	R1024	5402UE	7
RG59-QS-RB	R1025	-	57
RG6-QS-RB	R1026	9116	57
RG11-QS-RB	R1027	1523A	57
RG59-RB	R1028	543945	53
RG6-RB	R1029	533945	53
RG11-RB	R1030	513945	53
CAT3-2P-RB	R1031	1227A1	39
CAT3-25P-RB	R1032	1232A1	39
CAT3-50P-RB	R1033	-	39
CAT3-100P-RB	R1034	-	39
UTPLEVEL5-4X2X0.22-RB	R1035	-	41

CABLE CODE	PART N°	BELDEN	PAGE
FTPLEVEL54X2X0.22-RB	R1036	-	41
UTPLEVEL6-4X2X0.22-RB	R1037	7965E	43
FTPLEVEL64X2X0.22-RB-RB	R1038	7860E	43
SFTPLEVEL7-RB	R1039	1885ENH	47
SAR0203HFOCH-UL-FA-RB	R1040	9574	65
SAR0202HFOCH-UL-FA-RB	R1041	9575	65
SAR0201HFOCH-UL-FA-RB	R1042	9581	65
SAR0252HFOCH-UL-FA-RB	R1043	9583	65
SAR0214HFESL-F3(IE)-RB	R1044	-	69
SAR0218HFESL-F3(IE)-RB	R1045	-	69
SAS0210HFESL-F3PH120-RB	R1046	-	71
SAS0215HFESL-F3PH120-RB	R1047	-	71
SAS0225HFESL-F3PH120-RB	R1048	-	71
SAR0211HFEEL-F3-RB	R1050	-	73
SAR0214HFEEL-F3-RB	R1051	-	73
FTPLEVEL6A4X2X0.22ZA-RB	R1052	-	45
SAR0218HFEEL-F3-RB	R1052	-	73
UFTPLEVEL6A4X2X0.22ZA-RB	R1053	-	45
UTPLEVEL6A4X2X0.22-RB	R1055	-	45
FTPLEVEL6A4X2X0.22-RB	R1056	-	45
UFTPLEVEL6A4X2X0.22-RB	R1057	-	45
SAR0311HFESP-F3PH120-RB	R1064	-	71
SAS0310HFESP-F3PH120-RB	R1065	-	71
SAR0314HFESP-F3PH120-RB	R1066	-	71
SAS0315HFESP-F3PH120-RB	R1067	-	71
SAR0318HFESP-F3PH120-RB	R1068	-	71
SAS0325HFESP-F3PH120-RB	R1069	-	71
SAS0340HFESP-F3PH120-RB	R1070	-	71
MAR0107HBADX-T-RB	R1080	3105A	23
SSR0203HFOCH-UL-FA-RB	R1136	9572	65
SSR0202HFOCH-UL-FA-RB	R1137	9580	65
SSR0201HFOCH-UL-FA-RB	R1138	9582	65
SSR0251HFOCH-UL-FA-RB	R1138	-	65
SAS0210HFESL-F3(IE)-RB	R1140	-	69
SAS0215HFESL-F3(IE)-RB	R1141	-	69

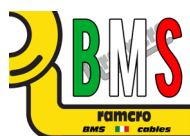


PART NUMBER INDEX

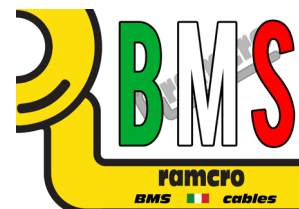


CABLE CODE	PART N°	BELDEN	PAGE
SAS0225HFESL-F3(IE)-RB	R1142	-	69
SAS0310HFESP-F3(IE)-RB	R1150	-	69
SAS0315HFESP-F3(IE)-RB	R1151	-	69
SAS0325HFESP-F3(IE)-RB	R1152	-	69
SAR0311HFESP-F3(IE)-RB	R1160	-	69
SAR0314HFESP-F3(IE)-RB	R1161	-	69
SAR0318HFESP-F3(IE)-RB	R1162	-	69
SAS0340HFESP-F3(IE)-RB	R1163	-	69
MAS0108HBAAH-T-RB	R1181	9501	27
MAS0208HBAAX-T-RB	R1182	9502	27
MAS0308HBAAX-T-RB	R1183	9503	27
MAS0408HBAAX-T-RB	R1184	9504	27
MAS0508HBAAX-T-RB	R1185	9505	27
MAS0608HBAAX-T-RB	R1186	9506	27
MAS0708HBAAX-T-RB	R1187	9507	27
MAS0808HBAAX-T-RB	R1188	9508	27
MAR0108HBADX-T-RB	R1189	9841	23
MAR0208HBADX-T-RB	R1190	9842	23
MAR0308HBADX-T-RB	R1191	9843	23
MAR0408HBADX-T-RB	R1192	9844	23
MAS0105HBADN-T-RB	R1193	8760	33
MAS0106HBADN-T-RB	R1195	8762	33
MAP0207HBADH-T-RB	R1196	8723	29
MAP0308HBADX-T-RB	R1197	8777	29
MSE0103HBADN-T-RB	R1198	8471	31
MAS0107HBADN-T-RB	R1199	8761	33
UTPLEVEL6A4X2X0.22ZA-RB	R1200	-	45
SFTPLEVEL7A-RB	R1201	-	49
MSE0105HBADN-T-RB	R1203	9740	31
SAS0605HBAXX-RB	R1211	5304FE	9
SSS0605HBAXX-RB	R1212	5304UE	7
MAS0103HBADN-T-RB	R1213	8719	33
MAP0608HBADX-T-RB	R1214	8778	29
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SAM4108HIADX-RB	R1217	YE00820	37

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MSE0101HBADN-T-RB	R1222	8473	31
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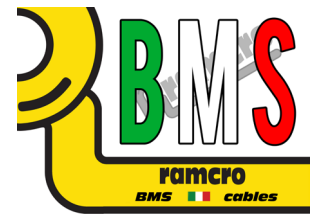


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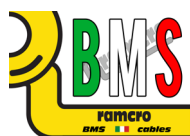


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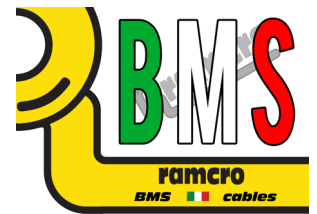


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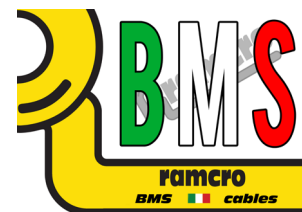


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MAS0101HEDDN-T-RB	R1871	-	33
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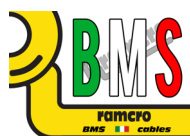


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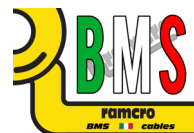
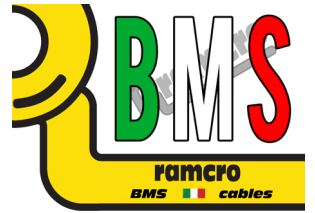


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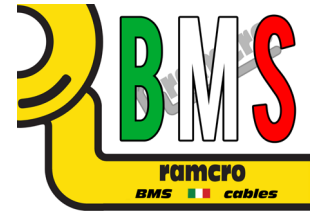
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NOTE



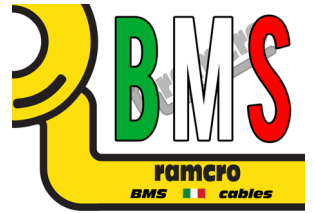
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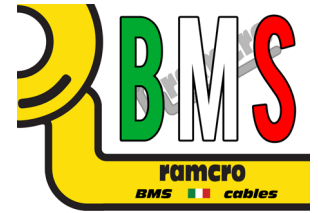
Assessed to ISO 9001:2015
LPCB Cert. No 988



NOTE



NOTE





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Edited by Sales Director on July 2018

Dr. Carlo Croci

Approved by AQ: PC



FIRE RESISTANT CABLE

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Fire Resistant Cable

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

All RAMCRO fire resistant cable are with sub-brand RAMFIRECRO-F3, are manufactured in according to the major international standard; BS 6387 C-W-Z - BS 7629 - IEC 60331-21 - EN 50200 - BS 8434-2 etc.

The material and the structure used for this type of cables depends on the performance required: fire time exposition, fire temperature and extra burning events.

Fire performance classes: Flame retardant (FRLS), Low smoke fumes (LS), Fire resistant (FRHF), Low smoke, Halogen free and Fire retardant (HF).

The typically applications for this type of cable are the transmission of analogue and digital signal and control systems.

Allowed for use in zone 1 and 2, group II, classified areas (IEC 60079-14).

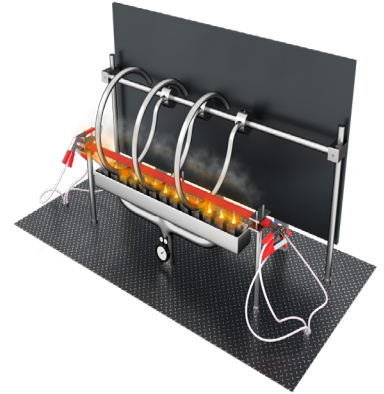


FIRE RESISTANT TEST

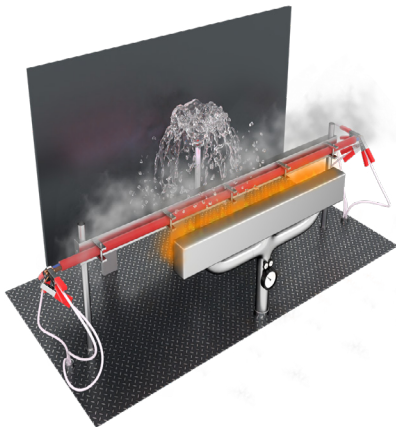
All the fire resistant test are carried out in RAMCRO LAB

FIRE RESISTANCE (Cat. C)

The cable is exposed to fire at the 950°C for 180 minutes.



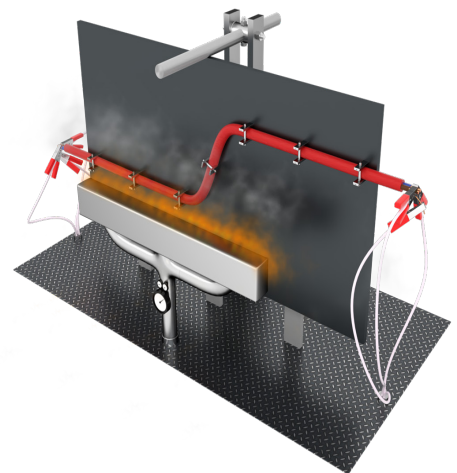
FIRE AND WATER RESISTANCE (Cat. W)



The cable is exposed for 15 minutes to flame at 650°C and for additional 15 minutes to fire and water spray.

FIRE RESISTANCE WITH MECHANICAL SHOCKS (Cat. Z)

The cable is mounted on a vertical panel and shocked with a steel bar for 15 minutes while submitted to the action of a flame.

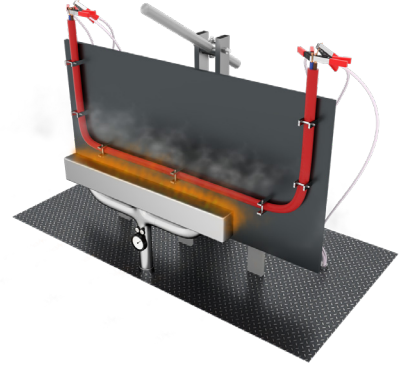


FIRE RESISTANT TEST

All the fire resistant test are carried out in RAMCRO LAB

FIRE RESISTANCE (EN 50200 PH 15-30-60-90-120)

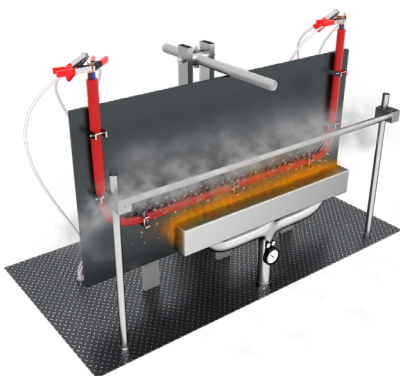
This test is carried out to verify the circuit integrity of cables exposed to fire at 830°C and mechanical shocks.



CLASSIFICATION

EN 50200 PH 15	Flame exposure for 15 min
EN 50200 PH 30	Flame exposure for 30 min
EN 50200 PH 60	Flame exposure for 60 min
EN 50200 PH 90	Flame exposure for 90 min
EN 50200 PH 120	Flame exposure for 120 min

FIRE RESISTANCE BS EN 50200 annex E



This test is carried out to verify circuit integrity during a fire. The cable is exposed to a flame at 830°C and mechanical shocks for 15 minutes and additional 15 minutes to flame, mechanical shocks and water spray.

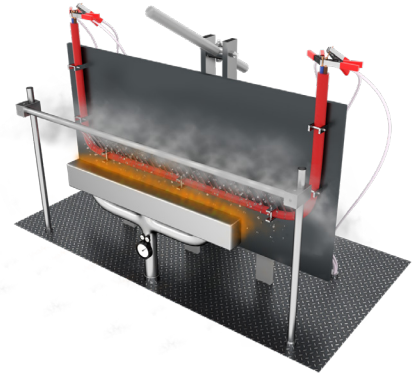


FIRE RESISTANT TEST

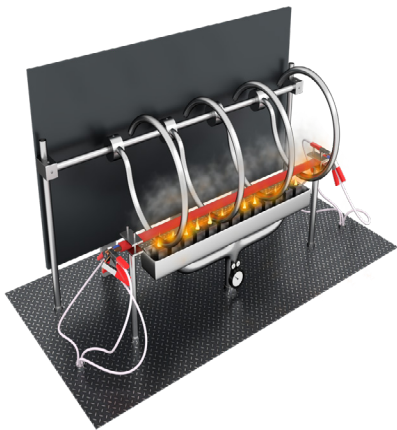
All the fire resistant test are carried out in RAMCRO LAB

FIRE RESISTANCE (BS 8434-2)

This test is carried out to verify circuit integrity during a fire. The cable is exposed to a flame at 930°C and mechanical shocks for 60 minutes and additional 60 minutes to flame, mechanical shocks and water spray.



FIRE RESISTANCE (IEC 60331-21, CEI 20-36)



This test is carried out to verify circuit integrity even during a fire. A sample of cable is held on a flame at about 750°C for a period of minimum 90 min, under rated voltage.

FIRE RETARDANT TEST

All the fire resistant test are carried out in RAMCRO LAB

FLAME PROPAGATION TEST ON A SINGLE CABLE (IEC 60332-1)

A 60 cm long sample of cable is vertically fixed with two clamps inside a small cabin, open on the front. The cable is subjected to the action of a flame produced by a calibrated Bunsen burner.

The application time of the flame is according to the cable diameter (60-480 seconds).

At the end of the test the burnt portion of cable must not be 50 mm close to the higher clamp.



FIRE RETARDANT TEST

All the fire resistant test are carried out in RAMCRO LAB

FIRE PROPAGATION TEST ON BUNCHED CABLES (IEC 60332-3)



Samples of cables 3,5 m long in quantities required by standard are installed on a ladder inside a metallic cabinet. They are subjected to the action of a flame at 750°C for a specific time (20 or 40 minutes).

Cables must not burn for more than 2,5 m.

FIRE RESISTANT CABLE

BS 6387:2013 Cat. C-W-Z

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE PLANET - BS 6387:2013



CONSTRUCTION

Formation:

Plain annealed copper wire, solid

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

- BS 6387:2013 Cat. C-W-Z
- IEC 60754-1:2014
- BS EN 61034-2:2005
- EN 50200:2015 (Class PH30/PH120)

IDENTIFICATION OF CORES

2 cores: ● ●

3 cores: ● ● ●

4 cores: ● ● ● ●

up/from 5 cores: Black Numbered

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 - FIRE RESISTANT – LSZH – LPCB 568a/02 – BS EN 50267-2-1 – BS 6387 C-W-Z – EN 50200 PH 120 – 300/500V – CONDxAREA + E BATCH N. + MADE IN ITALY

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MΩ*km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



BS 6387:2013 Cat. C-W-Z

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAR0211HFESL-F3(IE)	2x1.00*	6.2*	56	18.5
SAR0311HFESP-F3(IE)	3x1.00*	6.3*	72	18.5
SAR0411HFESQ-F3(IE)	4x1.00*	6.9*	91	18.5
SAR0511HFESD-F3(IE)	5x1.00	7.8	113	18.5
SAR0711HFESD-F3(IE)	7x1.00	8.4	147	18.5
SAR1211HFESD-F3(IE)	12x1.00	11.0	238	18.5
SAR1911HFESD-F3(IE)	19x1.00	12.8	357	18.5
SAR0214HFESL-F3(IE)	2x1.50**	6.6**	67	12.3
SAR0314HFESP-F3(IE)	3x1.50**	6.8**	88	12.3
SAR0414HFESQ-F3(IE)	4x1.50**	7.4**	111	12.3
SAR0514HFESD-F3(IE)	5x1.50	8.3	138	12.3
SAR0714HFESD-F3(IE)	7x1.50	9.0	181	12.3
SAR1214HFESD-F3(IE)	12x1.50	11.8	296	12.3
SAR1914HFESD-F3(IE)	19x1.50	14.2	461	12.3
SAR0218HFESL-F3(IE)	2x2.50**	7.4**	89	7.6
SAR0318HFESP-F3(IE)	3x2.50**	7.7**	123	7.6
SAR0418HFESQ-F3(IE)	4x2.50**	8.4**	157	7.6
SAR0518HFESD-F3(IE)	5x2.50	9.2	191	7.6
SAR0718HFESD-F3(IE)	7x2.50	10.1	254	7.6
SAR1218HFESD-F3(IE)	12x2.50	13.2	418	7.6
SAR1918HFESD-F3(IE)	19x2.50	16.0	654	7.6

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the RAMCRO CODE will change in: SAR__HCESL-F3(IE)

BS 6387:2013 Cat. C-W-Z

Multi-Core, Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE PLANET - BS 6387:2013



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 strand

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

- BS 6387:2013 Cat. C-W-Z
- IEC 60754-1:2014
- BS EN 61034-2:2005
- EN 50200:2015 (Class PH30/PH120)

IDENTIFICATION OF CORES

2 cores: ● ●

3 cores: ● ● ●

4 cores: ● ● ● ●

up/from 5 cores: Black Numbered

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 - FIRE PLANET – LSZH – LPCB 568a/02 – EN 60754-1 – BS 6387 C-W-Z – EN 50200 PH30/PH120 – 300/500V – CONDxAREA + E BATCH N. + MADE IN ITALY

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



BS 6387:2013 Cat. C-W-Z

Multi-Core, Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0210HFESL-F3(IE)	2x1.00*	6.5*	59	18.5
SAS0310HFESP-F3(IE)	3x1.00*	6.6*	76	18.5
SAS0410HFESQ-F3(IE)	4x1.00*	7.2*	95	18.5
SAS0510HFESD-F3(IE)	5x1.00	8.1	118	18.5
SAS0710HFESD-F3(IE)	7x1.00	8.8	154	18.5
SAS1210HFESD-F3(IE)	12x1.00	11.5	248	18.5
SAS1910HFESD-F3(IE)	19x1.00	13.5	372	18.5
SAS0215HFESL-F3(IE)	2x1.50*	7.0*	72	12.3
SAS0315HFESP-F3(IE)	3x1.50*	7.2*	95	12.3
SAS0415HFESQ-F3(IE)	4x1.50*	8.1*	123	12.3
SAS0515HFESD-F3(IE)	5x1.50	8.8	148	12.3
SAS0715HFESD-F3(IE)	7x1.50	9.6	196	12.3
SAS1215HFESD-F3(IE)	12x1.50	12.6	319	12.3
SAS1915HFESD-F3(IE)	19x1.50	15.2	498	12.3
SAS0225HFESL-F3(IE)	2x2.50*	8.1*	101	7.6
SAS0325HFESP-F3(IE)	3x2.50*	8.3*	135	7.6
SAS0425HFESQ-F3(IE)	4x2.50*	9.1*	170	7.6
SAS0525HFESD-F3(IE)	5x2.50	9.9	207	7.6
SAS0725HFESD-F3(IE)	7x2.50	10.8	277	7.6
SAS1225HFESD-F3(IE)	12x2.50	14.7	470	7.6
SAS1925HFESD-F3(IE)	19x2.50	17.2	713	7.6
SAS0240HFESL-F3(IE)	2x4.00*	10.0*	151	4.7
SAS0340HFESP-F3(IE)	3x4.00*	10.2*	205	4.7
SAS0440HFESQ-F3(IE)	4x4.00*	11.2*	263	4.7
SAS0540HFESD-F3(IE)	5x4.00	12.3	322	4.7

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the RAMCRO CODE will change in: SAS__HCESL-F3(IE)

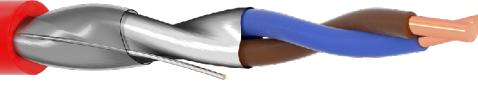
STANDARD FIRE SUN

LPCB 568c/02

BS 7629-1:2008

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - STANDARD FIRE SUN - BS 7629-1:2008



CONSTRUCTION

Formation:

Plain annealed copper wire, solid

Insulation:

Special mix silicon rubber

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

- BS 7629-1:2008
- BS 6387:2013 (CWZ)
- EN 50200:2006 (Class PH30/PH120)
- EN 50200:2006 Annex E (30 mins)
- BS 5839-1:2013 (Clause 26.2d Standard)

IDENTIFICATION OF CORES

2 cores: ● ●

3 cores: ● ● ●

4 cores: ● ● ● ●

up/from 5 cores: Black Numbered

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO -F3 STANDARD FIRE SUN - FIRE RESISTANT ELECTRIC CABLE - LSZH - 300/500V - BS 7629-1:2008 - BS EN50200 PH30/120 - BS 6387 CWZ - 2x1,5 mmq + E - LPCB 568c/02 - MADE IN ITALY - BATCH N°

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



BS 7629-1:2008

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAR0211HFESL-F3PH120	2x1.00*	6.4*	66	18.5
SAR0311HFESP-F3PH120	3x1.00*	6.5*	83	18.5
SAR0411HFESQ-F3PH120	4x1.00*	7.1*	101	18.5
SAR0511HFESD-F3PH120	5x1.00	7.8	120	18.5
SAR0711HFESD-F3PH120	7x1.00	8.4	155	18.5
SAR1211HFESD-F3PH120	12x1.00	11.2	251	18.5
SAR1911HFESD-F3PH120	19x1.00	13.0	370	18.5
SAR0214HFESL-F3PH120	2x1.50*	7.3*	88	12.3
SAR0314HFESP-F3PH120	3x1.50*	7.4*	111	12.3
SAR0414HFESQ-F3PH120	4x1.50*	8.1*	137	12.3
SAR0514HFESD-F3PH120	5x1.50	8.8	162	12.3
SAR0714HFESD-F3PH120	7x1.50	9.6	211	12.3
SAR1214HFESD-F3PH120	12x1.50	12.9	342	12.3
SAR1914HFESD-F3PH120	19x1.50	15.1	510	12.3
SAR0218HFESL-F3PH120	2x2.50*	8.6*	129	7.6
SAR0318HFESP-F3PH120	3x2.50*	8.7*	166	7.6
SAR0418HFESQ-F3PH120	4x2.50*	9.6*	205	7.6
SAR0518HFESD-F3PH120	5x2.50	10.7	251	7.6
SAR0718HFESD-F3PH120	7x2.50	11.7	326	7.6
SAR1218HFESD-F3PH120	12x2.50	15.4	523	7.6
SAR1918HFESD-F3PH120	19x2.50	18.1	787	7.6

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the RAMCRO CODE will change in: SAR___HCESL-F3PH120

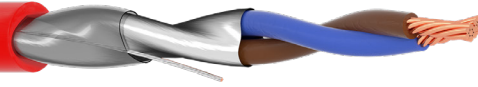
STANDARD FIRE SUN

LPCB 568c/02

BS 7629-1:2008

Multi-Core, Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - STANDARD FIRE SUN - BS 7629-1:2008



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 strand

Insulation:

Special mix silicon rubber

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

- BS 7629-1:2008
- BS 6387:2013 (CWZ)
- EN 50200:2006 (Class PH30/PH120)
- EN 50200:2006 Annex E (30 mins)
- BS 5839-1:2013 (Clause 26.2d Standard)

IDENTIFICATION OF CORES

2 cores: ● ●

3 cores: ● ● ●

4 cores: ● ● ● ●

up/from 5 cores: Black Numbered

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMFIRECRO -F3 STANDARD FIRE SUN - FIRE RESISTANT ELECTRIC CABLE - LSZH - 300/500V - BS 7629-1:2008 - BS EN50200 PH30/120 - BS 6387 CWZ - 2x1,5 mmq + E - LPCB 568c/02 - MADE IN ITALY - BATCH N°

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



BS 7629-1:2008

Multi-Core, Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0210HFESL-F3PH120	2x1.00*	6.7*	69	18.5
SAS0310HFESP-F3PH120	3x1.00*	6.8*	86	18.5
SAS0410HFESQ-F3PH120	4x1.00*	7.4*	105	18.5
SAS0510HFESD-F3PH120	5x1.00	8.1	125	18.5
SAS0710HFESD-F3PH120	7x1.00	8.8	160	18.5
SAS1210HFESD-F3PH120	12x1.00	11.7	261	18.5
SAS1910HFESD-F3PH120	19x1.00	13.7	386	18.5
SAS0215HFESL-F3PH120	2x1.50*	7.6*	92	12.3
SAS0315HFESP-F3PH120	3x1.50*	7.8*	116	12.3
SAS0415HFESQ-F3PH120	4x1.50*	8.5*	143	12.3
SAS0515HFESD-F3PH120	5x1.50	9.3	171	12.3
SAS0715HFESD-F3PH120	7x1.50	10.3	227	12.3
SAS1215HFESD-F3PH120	12x1.50	13.6	362	12.3
SAS1915HFESD-F3PH120	19x1.50	15.9	540	12.3
SAS0225HFESL-F3PH120	2x2.50*	9.0*	135	7.6
SAS0325HFESP-F3PH120	3x2.50*	9.2*	174	7.6
SAS0425HFESQ-F3PH120	4x2.50*	10.3*	220	7.6
SAS0525HFESD-F3PH120	5x2.50	11.3	262	7.6
SAS0725HFESD-F3PH120	7x2.50	12.3	343	7.6
SAS1225HFESD-F3PH120	12x2.50	16.3	350	7.6
SAS1925HFESD-F3PH120	19x2.50	19.2	827	7.6
SAS0240HFESL-F3PH120	2x4.00*	10.2*	189	4.7
SAS0340HFESP-F3PH120	3x4.00*	10.4*	244	4.7
SAS0440HFESQ-F3PH120	4x4.00*	11.4*	302	4.7
SAS0540HFESD-F3PH120	5x4.00	12.5	362	4.7

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the RAMCRO CODE will change in: SAS__HCESL-F3PH120

IEC 60331-21:1999

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE SAFE - IEC 60331-21:1999



CONSTRUCTION

Formation:

Plain annealed copper wire, solid

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

- IEC 60331-21:1999

- EN 50267-2-1:1999

- EN 61034-2:2005

IDENTIFICATION OF CORES

2 cores: ● ●

3 cores: ● ● ●

4 cores: ● ● ● ●

up/from 5 cores: Black Numbered

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 -FIRE SAFE- IEC 60331 N° COND. X AREA + E – LSZH 1 1/2 H 750 - LPCB 568d/01 - IEC 60331-21 - 300/500 V - BATCH N°

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



IEC 60331-21:1999

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAR0211HFEEL-F3	2x1.00*	6.8*	62	18.5
SAR0311HFEEP-F3	3x1.00*	7.2*	80	18.5
SAR0411HFEEQ-F3	4x1.00*	7.9*	100	18.5
SAR0511HFEED-F3	5x1.00	9.0	128	18.5
SAR0711HFEED-F3	7x1.00	9.8	165	18.5
SAR1211HFEED-F3	12x1.00	12.7	264	18.5
SAR1911HFEED-F3	19x1.00	15.2	407	18.5
SAR0214HFEEL-F3	2x1.50*	7.3*	73	12.3
SAR0314HFEEP-F3	3x1.50*	7.7*	97	12.3
SAR0414HFEEQ-F3	4x1.50*	8.4*	122	12.3
SAR0514HFEED-F3	5x1.50	9.6	156	12.3
SAR0714HFEED-F3	7x1.50	10.4	203	12.3
SAR1214HFEED-F3	12x1.50	13.6	329	12.3
SAR1914HFEED-F3	19x1.50	16.3	508	12.3
SAR0218HFEEL-F3	2x2.50*	8.1*	98	7.6
SAR0318HFEEP-F3	3x2.50*	8.6*	131	7.6
SAR0418HFEEQ-F3	4x2.50*	9.8*	177	7.6
SAR0518HFEED-F3	5x2.50	10.7	213	7.6
SAR0718HFEED-F3	7x2.50	11.6	282	7.6
SAR1218HFEED-F3	12x2.50	15.7	476	7.6
SAR1918HFEED-F3	19x2.50	18.7	734	7.6

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the part RAMCRO CODE will change in: SAR___HCEEL-F3

IEC 60331-21:1999

Multi-Core, Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE SAFE - IEC 60331-21:1999



CONSTRUCTION

Formation:

Plain annealed copper wire, 7 strand

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

- IEC 60331-21:1999
- EN 50267-2-1:1999
- EN 61034-2:2005

IDENTIFICATION OF CORES

2 cores: ● ●

3 cores: ● ● ●

4 cores: ● ● ● ●

up/from 5 cores: Black Numbered

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 -FIRE SAFE- IEC 60331 N° COND. X AREA + E – LSZH 1 1/2 H 750 - LPCB 568d/01 - IEC 60331-21 - 300/500 V - BATCH N°

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



IEC 60331-21:1999

Multi-Core, Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0210HFEEL-F3	2x1.00*	7.1*	64	18.5
SAS0310HFEEP-F3	3x1.00*	7.5*	83	18.5
SAS0410HFEEQ-F3	4x1.00*	8.2*	104	18.5
SAS0510HFEED-F3	5x1.00	9.4	133	18.5
SAS0710HFEED-F3	7x1.00	10.2	172	18.5
SAS1210HFEED-F3	12x1.00	13.3	276	18.5
SAS1910HFEED-F3	19x1.00	15.9	424	18.5
SAS0215HFEEL-F3	2x1.50*	7.6*	77	12.3
SAS0315HFEEP-F3	3x1.50*	8.1*	102	12.3
SAS0415HFEEQ-F3	4x1.50*	9.3*	137	12.3
SAS0515HFEED-F3	5x1.50	10.1	165	12.3
SAS0715HFEED-F3	7x1.50	11.0	215	12.3
SAS1215HFEED-F3	12x1.50	14.8	362	12.3
SAS1915HFEED-F3	19x1.50	17.2	537	12.3
SAS0225HFEEL-F3	2x2.50*	8.3*	103	7.6
SAS0325HFEEP-F3	3x2.50*	9.4*	147	7.6
SAS0425HFEEQ-F3	4x2.50*	10.3*	186	7.6
SAS0525HFEED-F3	5x2.50	11.3	224	7.6
SAS0725HFEED-F3	7x2.50	12.3	297	7.6
SAS1225HFEED-F3	12x2.50	16.6	502	7.6
SAS1925HFEED-F3	19x2.50	19.8	773	7.6

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the part RAMCRO CODE will change in: SAS___HCEEL-F3

BS 6387:2013 Cat. C-W-Z

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Steel Wire Armour, LSZH-Sheath

RAMFIRECRO-F3 - FIRE GROUND - BS 6387:2013



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Special mix silicon rubber

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Inner Sheath:

Thermoplastic Low Smoke, Halogen Free

Armour:

Galvanized steel wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free

Colour Outer Sheath:

Red

STANDARD REFERENCES

- BS 6387:2013 Cat. C-W-Z
- EN 60754-1:2014
- EN 61034-2:2005+A1:2013
- EN 60754-2:2014
- EN 60332-3-24:2009
- EN 60332-1-2:2004

IDENTIFICATION OF CORES

- 2 cores: ● ●
3 cores: ● ● ●
4 cores: ● ● ● ●
5 cores: ● ● ● ● ●

TEMPERATURE RANGE

- During Operation:**
-30° C up to +180°C
During Installation:
-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO -F3 - FIRE RESISTANT - LSZH - LPCB 568e/01 - BS 6387 CWZ - IEC 60332-3-24 - IEC 60332-1-2 - IEC 60502 - BS 7846 - 0,6/1 kV - 5x1,5 mmq - CU/Sil/LSZH/SWA/LSZH - ARMoured - MADE IN ITALY + BATCH N.

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

5000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

600/1000 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Power Cable



BS 6387:2013 Cat. C-W-Z

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Steel Wire Armour, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SSS0215AFESL-F3(FG)	2x1.50	14.2*	373	13.8
SSS0315AFESP-F3(FG)	3x1.50	14.3*	395	13.8
SSS0415AFESQ-F3(FG)	4x1.50	15.1*	440	13.8
SSS0515AFESD-F3(FG)	5x1.50	16.6*	563	13.8
SSS0225AFESL-F3(FG)	2x2.50	16.2*	530	8.3
SSS0375AFESP-F3(FG)	3x2.50	16.4*	566	8.3
SSS0475AFESQ-F3(FG)	4x2.50	17.3*	635	8.3
SSS0575AFESD-F3(FG)	5x2.50	18.3*	709	8.3
SSS0240AFESL-F3(FG)	2x4.00	17.1*	592	5.1
SSS0340AFESP-F3(FG)	3x4.00	17.3*	640	5.1
SSS0440AFESQ-F3(FG)	4x4.00	18.3*	725	5.1
SSS0540AFESD-F3(FG)	5x4.00	19.4*	815	5.1
SSS0260AFESL-F3(FG)	2x6.00	18.6*	716	3.4
SSS0360AFESP-F3(FG)	3x6.00	18.8*	786	3.4
SSS0460AFESQ-F3(FG)	4x6.00	20.0**	902	3.4
SSS0560AFESD-F3(FG)	5x6.00	22.0**	1132	3.4
SSS0211AFESL-F3(FG)	2x10.00	20.6**	910	2.0
SSS0311AFESP-F3(FG)	3x10.00	20.9**	1021	2.0
SSS0411AFESQ-F3(FG)	4x10.00	23.1**	1303	2.0
SSS0511AFESD-F3(FG)	5x10.00	24.6**	1492	2.0
SSS0216AFESL-F3(FG)	2x16.00	24.1**	1306	1.3
SSS0316AFESP-F3(FG)	3x16.00	24.4**	1479	1.3
SSS0416AFESQ-F3(FG)	4x16.00	26.2**	1737	1.3
SSS0516AFESD-F3(FG)	5x16.00	28.3**	2022	1.3
SSS0227AFESL-F3(FG)	2x25.00	26.1**	1627	0.8
SSS0327AFESP-F3(FG)	3x25.00	26.5**	1888	0.8
SSS0427AFESQ-F3(FG)	4x25.00	28.8**	2266	0.8
SSS0527AFESD-F3(FG)	5x25.00	31.2**	2663	0.8

* Cables certified by LPCB BRE GLOBAL

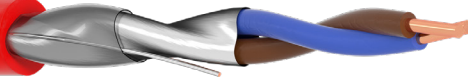
** The Ramfirecro-F3 FIRE GROUND range with diameters greater than 20mm were tested in accordance with clause 17.4.2 annex L BS 7846:2015

*** If the cable SSS___ACESL-F3(FG)

EN 50200:2015 Class PH 120

Multi-Core, Solid or Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE MOON ENHANCED - EN 50200:2015 PH 120



CONSTRUCTION

Formation:

Plain annealed copper wire, solid and stranded

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

- EN 50200:2015 (Class PH120)
- IEC 60754-1:2014
- EN 61034-2:2005+A1:2013

IDENTIFICATION OF CORES

2 cores: ● ●

3 cores: ● ● ●

4 cores: ● ● ● ●

up/from 5 cores: Black Numbered

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMFIRECRO – F3 ENHANCED – FIRE MOON – LSZH - LPCB 568f/01 - EN 50200 PH120 0.6/1 kV - coresXsec mmq + E BATCH N. + MADE IN ITALY

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

5000 V

Test Voltage Core-Screen:

5000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

600/1000 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Power Cable



EN 50200:2015 Class PH 120

Multi-Core, Solid or Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

Solid Version (Bare Copper Cl.1)

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAR0211IF-WFA10210	2x1.00*	8.0*	81	18.8
SAR0311IF-WFA10210	3x1.00	8.5	101	18.8
SAR0411IF-WFA10210	4x1.00	9.2	124	18.8
SAR0214IF-WFA10215	2x1.50*	8.7*	97	12.6
SAR0214IF-WFA10215	3x1.50	9.2	124	12.6
SAR0214IF-WFA10215	4x1.50	10.0	153	12.6
SAR0218IF-WFA10225	2x2.50*	9.7*	126	7.7
SAR0218IF-WFA10225	3x2.50	10.2	166	7.7
SAR0218IF-WFA10225	4x2.50	11.1	207	7.7

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the part RAMCRO CODE will change in: SAR____IC-WFA____

Stranded Version (Bare Copper Cl.2)

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0210IF-WFA10210	2x1.00*	8.3*	84	18.8
SAS0310IF-WFA10210	3x1.00	8.8	106	18.8
SAS0410IF-WFA10210	4x1.00	9.5	129	18.8
SAS0215IF-WFA10215	2x1.50*	9.0*	102	12.6
SAS0215IF-WFA10215	3x1.50	9.5	130	12.6
SAS0215IF-WFA10215	4x1.50	10.4	161	12.6
SAS0225IF-WFA10225	2x2.50*	10.1*	133	7.7
SAS0225IF-WFA10225	3x2.50	10.7	174	7.7
SAS0225IF-WFA10225	4x2.50	11.7	218	7.7

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the RAMCRO CODE will change in: SAS____IC-WFA____

LANFIRECRO-F3

LPCB 568g/01

EIA/TIA 568A, ISO/IEC 11801

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

LANFIRECRO-F3 - EIA/TIA 568A - ISO/IEC 11801



CONSTRUCTION

Formation:

Plain annealed copper wire, solid

Insulation:

- Polyethylene - PE
- Fiber Glass Tape

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

Colour Outer Sheath:

Red

STANDARD REFERENCES

- IEC 60331-21:1999
- IEC 60332-1-2:2004
- IEC 61034-2:2005
- EN 60754-1:2014

IDENTIFICATION OF CORES

- 1 pair:
- 2 pair:
- 3 pair:
- 4 pair:

TEMPERATURE RANGE

During Operation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

LANFIRECRO-F3 IEC 60331 - FIRE RESISTANT Data Cable Cat. 6 - 4x2x22AWG + E - LPCB 568g/01 – LSZH 90 min. 750 - IEC 60331-21 - 300 V - BATCH N° + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Data LAN



EIA/TIA 568A, ISO/IEC 11801

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAM0406HFEDX-F3CAT.6	4x2x22AWG*	11.0*	92	75.0

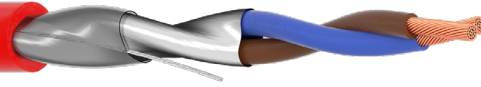
Frequency (MHz)	Max. Insetion Loss (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min. ACFR (ELFEXT) (dB)	Min. PSACRF (PSELFEXT) (dB)	Nin.RL (Return Loss) (dB)
1	2	74.3	72.3	72.3	70.3	70	68	20
4	3.8	65.3	63.3	61.5	59.5	58	56	23
8	5.3	60.8	58.8	55.5	53.5	51.9	49.9	24.5
10	6	59.3	57.3	53.3	51.3	50	48	25
16	7.6	56.2	54.3	48.6	46.6	45.9	43.9	25
20	8.5	54.8	52.8	46.3	44.3	44	42	25
25	9.5	53.3	51.3	43.8	41.8	42	40	24.3
31.25	10.7	51.9	49.9	41.2	39.2	40.1	38.1	23.6
62.5	15.4	47.4	45.4	32	30	34.1	32.1	21.5
100	19.8	44.3	42.3	24.5	22.5	30	28	20.1
155	25.2	41.5	39.5	16.2	14.2	26.2	24.2	18.8
200	29	39.8	37.8	10.8	8.8	24	22	18
250	32.8	38.3	36.3	5.5	32.5	22	20	17.3
300	36.4	37.1	35.1	0.7	-	20.5	18.5	16.8

* Cables certified by LPCB BRE GLOBAL

EN 50200:2015 Class PH 30

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE COMET - EN 50200:2015 PH 30



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

- EN 50200:2015 (Class PH30)
- EN 61034-2:2005+A1:2013
- EN 60754-1:2014

IDENTIFICATION OF CORES

2 cores: ● ●

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

During Operation:

-30° C up to +180° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMFIRECRO-F3 - FIRE COMET LSZH - EN 50200 PH30 - IEC 61034-2 - EN 60754-1 - 2x1.00 sqmm LPCB 568i/01 + BATCH + METER MARKING + MADE IN ITALY

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



EN 50200:2015 Class PH 30

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0210HFESL-F3FG4	2x1.00*	7.6*	67	19.9
SAS0215HFESL-F3FG4	2x1.50*	8.6*	88	13.6
SAS0225HFESL-F3FG4	2x2.50*	10.1*	129	8.1

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the part RAMCRO CODE will change in: SAR___HCESL-F3(IE)

CEI 20-105 - FG4OHM1 PH30/90

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath



CONSTRUCTION

- Formation:**
Plain annealed copper wire, Multistrand
- Insulation:**
Special mix silicon rubber
- 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
- Colour Outer Sheath:**
Red or Violet

STANDARD REFERENCES

- CEI 20-105
- UNI 9795
- CEI 20-36 PH 30 / 90
- EN 50200 PH 30 / 90
- CEI EN 60332-3-25

IDENTIFICATION OF CORES

- 2 cores: ● ●
- 4 cores: ● ● ○ ●

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

- Fixed Installation:**
-30° C up to +70° C
- During Installation:**
-5° C up to +50° C



CABLE PRINTING

RAMFIRECRO-F3 FIRE COMET CEI 20-105 FG4OHM1 2x1.00 mmq UNI9795 CEI 20-36/4-0 PH30/90
CEI EN 60332-3-25 EN 50575:2014+A1:2016 CPR Class Cca - s1a, d0, a1 - 100/100 V Uo=400 V BATCH
+ MM/YY

ELECTRICAL DATA

- Insulation Resistance @ 20°C:**
> 200 MOhm*Km
- Test Voltage Core-Core:**
2000 V
- Test Voltage Core-Screen:**
2000 V
- Mutual Capacitance:**
< 150 nF/km
- Inductance:**
< 1 mH/km
- Operating Voltage:**
100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



Italian Market



CEI 20-105 - FG4OHM1 PH30/90

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HFEEH-F3FG4	2x0.50*	5.6*	44	39.8
SAS0450HFEEH-F3FG4	4x0.50*	6.2*	64	39.8
SAS0275HFEEH-F3FG4	2x0.75*	6.3*	54	26.5
SAS0475HFEEH-F3FG4	4x0.75*	7.0*	82	26.5
SAS0210HFEEH-F3FG4	2x1.00*	6.6*	60	19.9
SAS0410HFEEH-F3FG4	4x1.00*	7.2*	92	19.9
SAS0215HFEEH-F3FG4	2x1.50*	7.6*	79	13.6
SAS0415HFEEH-F3FG4	4x1.50*	8.7*	131	13.6
SAS0225HFEEH-F3FG4	2x2.50*	9.2*	119	8.1
SAS0425HFEEH-F3FG4	4x2.50*	10.5*	204	8.1

* Cables certified by IMQ

Cables for EVAC voice evacuation systems - Violet Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HXEEH-F3FG4	2x0.50*	5.6*	44	39.8
SAS0450HXEEH-F3FG4	4x0.50*	6.2*	64	39.8
SAS0275HXEEH-F3FG4	2x0.75*	6.3*	54	26.5
SAS0475HXEEH-F3FG4	4x0.75*	7.0*	82	26.5
SAS0210HXEEH-F3FG4	2x1.00*	6.6*	60	19.9
SAS0410HXEEH-F3FG4	4x1.00*	7.2*	92	19.9
SAS0215HXEEH-F3FG4	2x1.50*	7.6*	79	13.6
SAS0415HXEEH-F3FG4	4x1.50*	8.7*	131	13.6
SAS0225HXEEH-F3FG4	2x2.50*	9.2*	119	8.1
SAS0425HXEEH-F3FG4	4x2.50*	10.5*	204	8.1

* Cables certified by IMQ

FIRE COMET

CEI 20-105 - FG4OHM1 PH120

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FG4OHM1



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Special mix silicon rubber

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

Colour Outer Sheath:

Red or Violet

STANDARD REFERENCES

- CEI 20-105
- UNI 9795
- CEI 20-36 PH 120
- EN 50200 PH 120
- CEI EN 60332-3-25

IDENTIFICATION OF CORES

2 cores: ● ●

4 cores: ● ● ○ ●

CPR CLASSIFICATION

EN 50575:2016 - C_{CA} s1A, d0, a1

TEMPERATURE RANGE

Fixed Installation:

-30° C up to +70° C

During Installation:

-5° C up to +50° C



CABLE PRINTING

RAMFIRECRO-F3 FIRE COMET CEI 20-105 FG4OHM1 2x1.00 mmq UNI9795 CEI 20-36/4-0 PH120
CEI EN 60332-3-25 EN 50575:2014+A1:2016 CPR Class Cca - s1a, d0, a1 - 100/100 V U_o= 400 V + MM/
YY

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



Italian Market



FIRE COMET

CEI 20-105 - FG4OHM1 PH120

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HFEEH-F3FG4120	2x0.50	5.6	44	39.8
SAS0450HFEEH-F3FG4120	4x0.50	6.2	64	39.8
SAS0275HFEEH-F3FG4120	2x0.75	6.3	54	26.5
SAS0475HFEEH-F3FG4120	4x0.75	7.0	82	26.5
SAS0210HFEEH-F3FG4120	2x1.00	7.6	73	19.9
SAS0410HFEEH-F3FG4120	4x1.00	8.4	115	19.9
SAS0215HFEEH-F3FG4120	2x1.50	8.6	95	13.6
SAS0415HFEEH-F3FG4120	4x1.50	9.6	150	13.6
SAS0225HFEEH-F3FG4120	2x2.50	10.1	137	8.1
SAS0425HFEEH-F3FG4120	4x2.50	11.2	221	8.1

Cables for EVAC voice evacuation systems - Violet Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HFEEH-F3FG4120	2x0.50	5.6	44	39.8
SAS0450HFEEH-F3FG4120	4x0.50	6.2	64	39.8
SAS0275HFEEH-F3FG4120	2x0.75	6.3	54	26.5
SAS0475HFEEH-F3FG4120	4x0.75	7.0	82	26.5
SAS0210HFEEH-F3FG4120	2x1.00	7.6	73	19.9
SAS0410HFEEH-F3FG4120	4x1.00	8.4	115	19.9
SAS0215HFEEH-F3FG4120	2x1.50	8.6	95	13.6
SAS0415HFEEH-F3FG4120	4x1.50	9.6	150	13.6
SAS0225HFEEH-F3FG4120	2x2.50	10.1	137	8.1
SAS0425HFEEH-F3FG4120	4x2.50	11.2	221	8.1

FIRE COMET

CEI 20-105 - FTE4OHM1 PH30/90

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FTE4OHM1



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

Insulation:

Mica Tape + Cross Liked Polyethylene - XLPE

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free

Colour Outer Sheath:

Red or Violet

STANDARD REFERENCES

- CEI 20-105
- UNI 9795
- CEI 20-36 PH 30 / 90
- EN 50200 PH 30 / 90
- CEI EN 60332-3-25

IDENTIFICATION OF CORES

2 cores: ● ●
4 cores: ● ● ○ ●

TEMPERATURE RANGE

Fixed Installation:

-30° C up to +70°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 FIRE COMET CEI 20-105 FTE4OHM1 2x1.00 mmq UNI 9795 CEI 20-36/4-0 PH30/90
CEI EN 60332-3-25 - 100/100 V - U₀=400 V + BATCH + MM/YY

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MΩ*km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



Italian Market



FIRE COMET

CEI 20-105 - FTE4OHM1 PH30/90

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HFEOH-F3FTE	2x0.50	7.0	59	39.8
SAS0250HFEOH-F3FTE	4x0.50	7.8	88	39.8
SAS0275HFEOH-F3FTE	2x0.75	7.5	67	26.5
SAS0275HFEOH-F3FTE	4x0.75	8.4	102	26.5
SAS0210HFEOH-F3FTE	2x1.00	7.8	74	19.9
SAS0210HFEOH-F3FTE	4x1.00	8.8	120	19.9
SAS0215HFEOH-F3FTE	2x1.50	8.6	92	13.6
SAS0215HFEOH-F3FTE	4x1.50	9.6	145	13.6
SAS0225HFEOH-F3FTE	2x2.50	9.6	122	8.1
SAS0225HFEOH-F3FTE	4x2.50	11.0	209	8.1

Cables for EVAC voice evacuation systems - Violet Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HXEOH-F3FTE	2x0.50	7.0	59	39.8
SAS0250HXEOH-F3FTE	4x0.50	7.8	88	39.8
SAS0275HXEOH-F3FTE	2x0.75	7.5	67	26.5
SAS0275HXEOH-F3FTE	4x0.75	8.4	102	26.5
SAS0210HXEOH-F3FTE	2x1.00	7.8	74	19.9
SAS0210HXEOH-F3FTE	4x1.00	8.8	120	19.9
SAS0215HXEOH-F3FTE	2x1.50	8.6	92	13.6
SAS0215HXEOH-F3FTE	4x1.50	9.6	145	13.6
SAS0225HXEOH-F3FTE	2x2.50	9.6	122	8.1
SAS0225HXEOH-F3FTE	4x2.50	11.0	209	8.1

FIRE COMET

CEI 20-105 - FTE4OHM1 PH120

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE COMET - CEI 20-105 - FTE4OHM1



CONSTRUCTION

Formation:

Plain annealed copper wire, Multistrand

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

Colour Outer Sheath:

Red or Violet

STANDARD REFERENCES

- CEI 20-105
- UNI 9795
- CEI 20-36 PH 120
- EN 50200 PH 120
- CEI EN 60332-3-25

IDENTIFICATION OF CORES

2 cores: ● ●
4 cores: ● ● ○ ●

TEMPERATURE RANGE

Fixed Installation:
-30° C up to +70°C
During Installation:
-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 FIRE COMET CEI 20-105 FTE4OHM1 2x1.00 mmq UNI 9795 CEI 20-36/4-0 PH120
CEI EN 60332-3-25 - 100/100 V - U_o=400 V + BATCH + MM/YY

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



Italian Market



FIRE COMET

CEI 20-105 - FTE4OHM1 PH120

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HFEOH-F3FTE120	2x0.50	7.0	59	39.8
SAS0250HFEOH-F3FTE120	4x0.50	7.8	88	39.8
SAS0275HFEOH-F3FTE120	2x0.75	7.5	68	26.5
SAS0275HFEOH-F3FTE120	4x0.75	8.4	102	26.5
SAS0210HFEOH-F3FTE120	2x1.00	8.2	79	19.9
SAS0210HFEOH-F3FTE120	4x1.00	9.3	128	19.9
SAS0215HFEOH-F3FTE120	2x1.50	9.2	100	13.6
SAS0215HFEOH-F3FTE120	4x1.50	10.6	169	13.6
SAS0225HFEOH-F3FTE120	2x2.50	10.7	142	8.1
SAS0225HFEOH-F3FTE120	4x2.50	11.9	232	8.1

Cables for EVAC voice evacuation systems - Violet Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0250HXEOH-F3FTE120	2x0.50	7.0	59	39.8
SAS0250HXEOH-F3FTE120	4x0.50	7.8	88	39.8
SAS0275HXEOH-F3FTE120	2x0.75	7.5	68	26.5
SAS0275HXEOH-F3FTE120	4x0.75	8.4	102	26.5
SAS0210HXEOH-F3FTE120	2x1.00	8.2	80	19.9
SAS0210HXEOH-F3FTE120	4x1.00	9.3	128	19.9
SAS0215HXEOH-F3FTE120	2x1.50	9.2	100	13.6
SAS0215HXEOH-F3FTE120	4x1.50	10.6	168	13.6
SAS0225HXEOH-F3FTE120	2x2.50	10.7	143	8.1
SAS0225HXEOH-F3FTE120	4x2.50	11.9	232	8.1

TELRAMFEU

NBN 713-020 CR1-C1

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

TELRAMFEU NBN 713-020 CR1-C1



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Special Mix Silicon Rubber

Collective Screen:

Aluminium / PETP tape over copper drain wire

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free

Colour Outer Sheath:

Orange

STANDARD REFERENCES

- NBN 713-020
- NF C32-070 CAT. C1 & C2
- EN 50200
- NBN C 30-004 F2 FR2
- NF C32-310

ON REQUEST

- Armor in Double Steel Tape (STA)
- Armor in Steel Wire Armour (SWA)
- Conductor Multistrand, Class 5

IDENTIFICATION OF CORES

- 1 Pair: ● ○
- 2 Pair: ● ●
- 3 Pair: ● ● ●

TEMPERATURE RANGE

Fixed Installation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 TELRAMFEU - 2PR 9/10 - CR1/C1 NF C 32-070 & IEC 60331 0.5 kV HALOGEN FREE + 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:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



French Market



TELRAMFEU

NBN 713-020 CR1-C1

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
PYR1P09-R	1x2x0.90	5.7	44	29.7
PYR2P09-R	2x2x0.90	8.7	83	29.7
PYR3P09-R	3x2x0.90	9.3	109	29.7
PYR4P09-R	4x2x0.90	10.6	146	29.7
PYR5P09-R	5x2x0.90	11.6	174	29.7
PYR6P09-R	6x2x0.90	13.0	215	29.7
PYR8P09-R	8x2x0.90	14.7	283	29.7
PYR10P09-R	10x2x0.90	17.0	345	29.7
PYR12P09-R	12x2x0.90	17.5	395	29.7

PUISSRAMFEU

NBN 713-020 CR1-C1

Multi-Core, Solid CU, Silicon Rubber-Insulation, LSZH-Sheath

TELAMFEU NBN 713-020 CR1-C1



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid

Insulation:

Special Mix Silicon Rubber

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free

Colour Outer Sheath:

Orange

STANDARD REFERENCES

- NBN 713-020
- NF C32-070 CAT. C1 & C2
- EN 50200
- NBN C 30-004 F2 FR2
- NF C32-310

ON REQUEST

- Armor in Double Steel Tape (STA)
- Armor in Steel Wire Armour (SWA)
- Conductor Multistrand, Class 5

IDENTIFICATION OF CORES

In acc. to HD 308

TEMPERATURE RANGE

Fixed Installation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 PUISSRAMFEU - 2x1.50 mm² - 300/500 V - CR1/C1 - week.prod./19 - BATCH + METER MARKING

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 200 MΩ*km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

100/100 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius

8 x cable diameter



Low Smoke Halogen Free



French Market



PUISSRAMFEU

NBN 713-020

Multi-Core, Solid CU, Silicon Rubber-Insulation, LSZH-Sheath

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
PYR0215-R-100	2x1.50	6.6	88	12.1
PYR0215-R-100	3x1.50	7.4	115	12.1
PYR0215-R-100	4x1.50	8.3	139	12.1
PYR0215-R-100	5x1.50	9.1	183	12.1
PYR022 5-R-100	2x2.50	8.4	99	7.41
PYR0225-R-100	3x2.50	8.9	133	7.41
PYR0225-R-100	4x2.50	10.0	174	7.41
PYR0225-R-100	5x2.50	10.9	211	7.41
PYR0240-R-100	2x4.00	10.0	148	4.61
PYR0240-R-100	3x4.00	10.6	201	4.61
PYR0240-R-100	4x4.00	11.9	263	4.61
PYR0240-R-100	5x4.00	13.0	320	4.61
PYR0260-R-100	2x6.00	11.4	201	3.08
PYR0260-R-100	3x6.00	12.3	285	3.08
PYR0260-R-100	4x6.00	13.6	365	3.08
PYR0260-R-100	5x6.00	15.1	455	3.08
PYR0210-R-100	2x10.00	14.2	334	1.83
PYR0210-R-100	3x10.00	15.1	466	1.83
PYR0210-R-100	4x10.00	16.8	610	1.83
PYR0210-R-100	5x10.00	18.7	758	1.83

BS 8434-2:2003+A2:2009 (120 min.)

Multi-Core, CU, Mica+XLPE+Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

RAMFIRECRO-F3 - FIRE STAR - BS 8434-2:2003+A2:2009



CONSTRUCTION

Formation:

Plain annealed copper wire, Solid or Stranded

Insulation:

- Mica Tape
- Cross Liked Polyetilene - XLPE
- Special mix silicon rubber

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Collective Screen:

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

Outer Sheath:

Thermoplastic Low Smoke, Halogen Free

Colour Outer Sheath:

Red or White

STANDARD REFERENCES

- BS 7629-1:2015 Enhanced 120
- EN 50200:2015 Annex E (30 mins)
- EN 50200:2015 (Class PH120)
- BS 8434-2:2003+A2:2009 (120 mins)
- EN 61034-2:2005+A1:2013
- EN 60754-1:2014

IDENTIFICATION OF CORES

- 2 cores: ● ●
3 cores: ● ● ●
4 cores: ● ● ● ●
up/from 5 cores: Black Numbered

TEMPERATURE RANGE

During Operation:

-30° C up to +180°C

During Installation:

-5° C up to +50°C



CABLE PRINTING

RAMFIRECRO-F3 FIRE STAR - FIRE RESISTANT ELECTRIC CABLE – LSZH - 300/500V - BS 7629-1:2015 ENHANCED 120 - 2x1,5 mmq + E - 2018 H - LPCB 568j/01 - MADE IN ITALY - BATCH N°

ELECTRICAL DATA

Insulation Resistance @ 20°C:

> 5000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance:

< 150 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300/500 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



BS 8434-2:2003+A2:2009 (120 min.)

Multi-Core, CU, Mica+XLPE+Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

Solid Version (Bare Copper Cl.1)

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAR0211HFEOL-F3EN120	2x1.00*	8.9*	102	18.5
SAR0311HFEOP-F3EN120	3x1.00*	9.4*	131	18.5
SAR0411HFEQQ-F3EN120	4x1.00*	10.3*	189	18.5
SAR0214HFEOL-F3EN120	2x1.50*	9.4*	119	12.3
SAR0314HFEOP-F3EN120	3x1.50*	9.9*	183	12.3
SAR0414HFEQQ-F3EN120	4x1.50*	11.1*	194	12.3
SAR0218HFEOL-F3EN120	2x2.50*	10.1*	155	7.6
SAR0318HFEOP-F3EN120	3x2.50*	10.8*	201	7.6
SAR0418HFEQQ-F3EN120	4x2.50*	12.0*	253	7.6

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the part RAMCRO CODE will change in: SAR___HCESL-F3(IE)

Stranded Version (Bare Copper Cl.2)

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAS0210HFEOL-F3EN120	2x1.00*	9.2*	105	18.5
SAS0310HFEOP-F3EN120	3x1.00*	9.7*	135	18.5
SAS0410HFEQQ-F3EN120	4x1.00*	10.7*	165	18.5
SAS0215HFEOL-F3EN120	2x1.50*	9.7*	126	12.3
SAS0315HFEOP-F3EN120	3x1.50*	10.3*	160	12.3
SAS0415HFEQQ-F3EN120	4x1.50*	11.5*	203	12.3
SAS0225HFEOL-F3EN120	2x2.50*	10.6*	161	7.6
SAS0325HFEOP-F3EN120	3x2.50*	11.5*	214	7.6
SAS0425HFEQQ-F3EN120	4x2.50*	12.6*	265	7.6
SAS0240HFEOL-F3EN120	2x4.00*	13.0*	246	4.7
SAS0340HFEOL-F3EN120	3x4.00*	13.9*	321	4.7
SAS0440HFEOL-F3EN120	4x4.00*	15.3*	398	4.7

* Cables certified by LPCB BRE GLOBAL

* if the cables are with a WHITE outer sheath the part RAMCRO CODE will change in: SAR___HCESL-F3(IE)

UL 1424

Multi-Core, PVC HT 105-Insulation, unscreened or with collective screen, Hi-Performance PVC-Sheath

FIRE ALARM - FPLR - UL 1424



CONSTRUCTION

Formation:
Plain annealed copper wire, Solid

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:
High Performance Polyvinyl chloride - Hi-PVC

Colour Outer Sheath:
Red

STANDARD REFERENCES

- UL 1424 (FPRL Type)
- NEC Article 760
- NEC Article 725
- UL 1666
- ASTM D 1329
- NF C 32-020
- IRAM IAP
- EN 50266-2
- IEC 60332-1
- IEC 60332-3

IDENTIFICATION OF CORES

2 cores: ● ●

TEMPERATURE RANGE

During Operation:
-30° C up to +105°C

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



CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E475091 Type FPLR - 2 C 18AWG - Shielded - 105°C + BATCH + METER MARKING

ELECTRICAL DATA

Insulation Resistance @ 20°C:
> 25 MOhm*Km

Test Voltage Core-Core:
2000 V

Test Voltage Core-Screen:
2000 V

Mutual Capacitance:
< 150 nF/km

Inductance:
< 1 mH/km

Operating Voltage:
300 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



UL 1424

Multi-Core, PVC HT 105-Insulation, unscreened or with collective screen, Hi-Performance PVC-Sheath

Screened Version

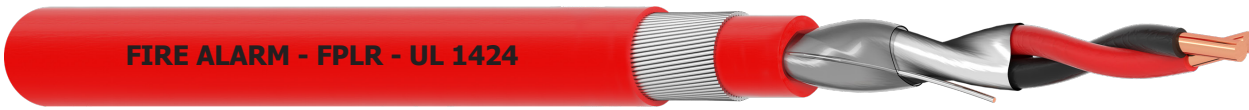
RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAR0204HFOCH-UL-FA	2x20AWG	3.3	20	34.0
SAR0203HFOCH-UL-FA	2x18AWG	3.8	27	21.4
SAR0202HFOCH-UL-FA	2x16AWG	4.1	38	13.5
SAR0201HFOCH-UL-FA	2x14AWG	5.7	70	8.5
SAR0251HFOCH-UL-FA	2x12AWG	6.5	90	5.3

Unscreened Version

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SSR0204HFOCH-UL-FA	2x20AWG	3.5	22	34.0
SSR0203HFOCH-UL-FA	2x18AWG	3.9	29	21.4
SSR0202HFOCH-UL-FA	2x16AWG	4.2	35	13.5
SSR0201HFOCH-UL-FA	2x14AWG	5.8	75	8.5
SSR0251HFOCH-UL-FA	2x12AWG	6.6	92	5.3

UL 1424

Multi-Core, PVC HT 105-Insulation, unscreened or with collective screen, Armoured, Hi-Performance PVC-Sheath



CONSTRUCTION

Formation:
Plain annealed copper wire, Solid

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:
High Performance Polyvinyl chloride - Hi-PVC

Armour:
Galvanized steel wire armour - SWA

Outer Sheath:
High Performance Polyvinyl chloride - Hi-PVC

Colour Outer Sheath:
Red

STANDARD REFERENCES

- UL 1424 (FPRL Type)
- NEC Article 760
- NEC Article 725
- UL 1666
- ASTM D 1329
- NF C 32-020
- IRAM IAP
- EN 50266-2
- IEC 60332-1
- IEC 60332-3

IDENTIFICATION OF CORES

2 cores: ● ●

TEMPERATURE RANGE

During Operation:
-30° C up to +105°C

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



CABLE PRINTING

RAMCRO S.p.A. – (UL) Listed E475091 Type FPLR - 2 C 18AWG - Shielded - 105°C + BATCH + METER MARKING

ELECTRICAL DATA

Insulation Resistance @ 20°C:
> 25 MOhm*Km

Test Voltage Core-Core:
2000 V

Test Voltage Core-Screen:
2000 V

Mutual Capacitance:
< 150 nF/km

Inductance:
< 1 mH/km

Operating Voltage:
300 V

CHARACTERISTICS

Fire Resistant



Min. Bending Radius
8 x cable diameter



Low Smoke Halogen Free



UL 1424

Multi-Core, PVC HT 105-Insulation, unscreened or with collective screen, Armoured, Hi-Performance PVC-Sheath

Screened Version

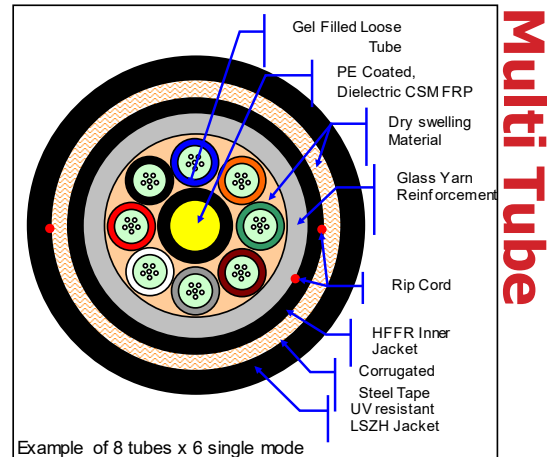
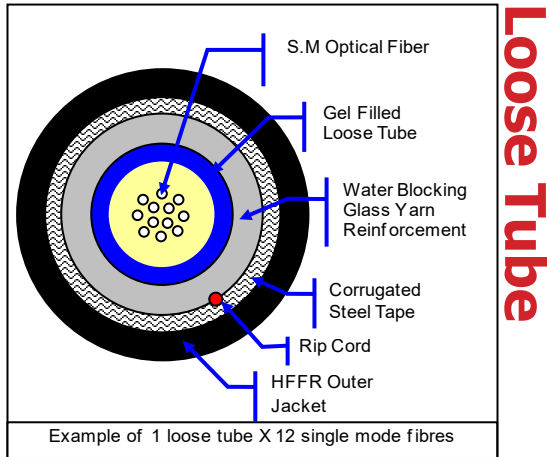
RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SAR0204AFOCH-UL-FA	2x20AWG	7.9	30	34.0
SAR0203AFOCH-UL-FA	2x18AWG	8.4	41	21.4
SAR0202AFOCH-UL-FA	2x16AWG	8.7	57	13.5
SAR0201AFOCH-UL-FA	2x14AWG	10.3	105	8.5
SAR0251AFOCH-UL-FA	2x12AWG	11.1	135	5.3

Unscreened Version

RAMCRO CODE	FORMATION [n° x mm ²]	OUTER DIAMETER [mm]	WEIGHT [kg/km]	MAX RESISTANCE AT 20°C [Ohm/km]
SSR0204AFOCH-UL-FA	2x20AWG	8.1	33	34.0
SSR0203AFOCH-UL-FA	2x18AWG	8.5	44	21.4
SSR0202AFOCH-UL-FA	2x16AWG	8.8	52	13.5
SSR0201AFOCH-UL-FA	2x14AWG	10.4	113	8.5
SSR0251AFOCH-UL-FA	2x12AWG	11.2	138	5.3

SINGLE MODE 9/125 μm

These Fiber Optic cables can incorporate up to 24 single mode fibers. The cable is glass yarn reinforced and jacketed with Halogen Free Flame Retardant compound (HFFR). The cable is designed for indoor/outdoor applications in ducts, direct burial or latched installations. Comply with IEC 60332- 3 & IEC 60331-25 flammability test and with halogen-free according to IEC 60754-2 Corrosively.



CONSTRUCTION

Fibres:

Up to Twenty-four single mode fibers, meeting or exceeding the ITU-T G.652/G.651 and/or IEC 60793 specifications color coded for easy identification

Tubes:

PBT tube.

Filling:

The tube is filled with water blocking, thixotropic gel to prevent the ingress of water.

Tubes Filled:

Dry, water swelling glass yarn is laid over the tube to serve as peripheral strength members and to block the cable from water penetration. LSZH inner jacket is extruded over the yarn.

Armouring:

A corrugated steel armor tape is longitudinally applied over the yarn with an overlap.

Sheath:

A UV resistant, Halogen Free, Flame-Retardant (HFFR) extruded over the armouring.

Ripcords:

laid under the steel tape to facilitate the jacket removal.

IDENTIFICATION OF FIBER



CONSTRUCTION

Fibres:

Up to 432 optical single mode fibers color coded for easy identification

Tubes:

PBT tube the tubes are SZ stranded around a dielectric central member

Filling:

The tube is filled with water blocking, thixotropic gel to prevent the ingress of water.

Tubes Filled:

Dry, water swelling glass yarn is laid over the tube to serve as peripheral strength members and to block the cable from water penetration. LSZH inner jacket is extruded over the yarn.

Armouring:

A corrugated steel armor tape is longitudinally applied over the yarn with an overlap.

Sheath:

A UV resistant, Halogen Free, Flame-Retardant (HFFR) extruded over the armouring.

Ripcords:

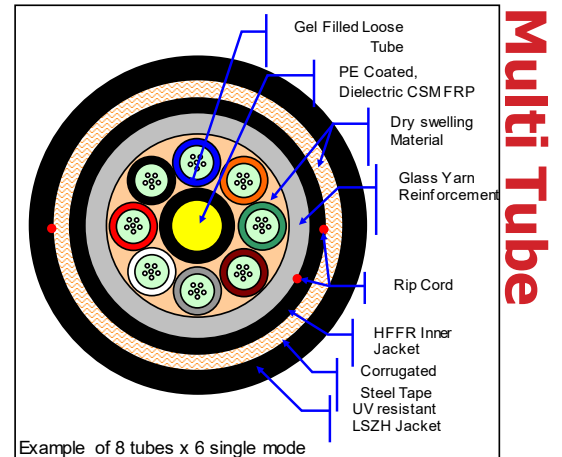
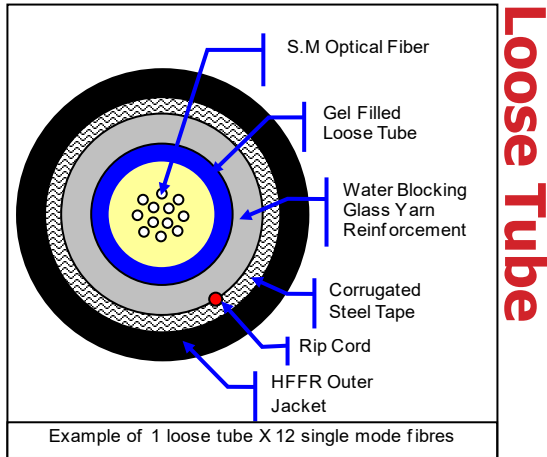
laid under the steel tape to facilitate the jacket removal.

STANDARD REFERENCES

- IEC 60331-25:1999
- IEC 60332-1-2:2004
- EN 61034-2:2005
- EN 60754-1:2014

MULTI MODE OM3 50/125 μm - 50/125 μm - 62.5/125 μm

These Fiber Optic cables can incorporate up to 24 single mode fibers. The cable is glass yarn reinforced and jacketed with Halogen Free Flame Retardant compound (HFFR). The cable is designed for indoor/outdoor applications in ducts, direct burial or latched installations. Comply with IEC 60332- 3 & IEC 60331-25 flammability test and with halogen-free according to IEC 60754-2 Corrosively.



CONSTRUCTION

Fibres:

Up to Twenty-four single mode fibers, meeting or exceeding the ITU-T G.652/G.651 and/or IEC 60793 specifications color coded for easy identification

Tubes:

PBT tube.

Filling:

The tube is filled with water blocking, thixotropic gel to prevent the ingress of water.

Tubes Filled:

Dry, water swelling glass yarn is laid over the tube to serve as peripheral strength members and to block the cable from water penetration. LSZH inner jacket is extruded over the yarn.

Armouring:

A corrugated steel armor tape is longitudinally applied over the yarn with an overlap.

Sheath:

UV resistant, Halogen Free, Flame-Retardant (HFFR) extruded over the armouring.

Ripcords:

laid under the steel tape to facilitate the jacket removal.

CONSTRUCTION

Fibres:

Up to 432 optical single mode fibers color coded for easy identification

Tubes:

PBT tube the tubes are SZ stranded around a dielectric central member

Filling:

The tube is filled with water blocking, thixotropic gel to prevent the ingress of water.

Tubes Filled:

Dry, water swelling glass yarn is laid over the tube to serve as peripheral strength members and to block the cable from water penetration. LSZH inner jacket is extruded over the yarn.

Armouring:

A corrugated steel armor tape is longitudinally applied over the yarn with an overlap.

Sheath:

UV resistant, Halogen Free, Flame-Retardant (HFFR) extruded over the armouring.

Ripcords:

laid under the steel tape to facilitate the jacket removal.

IDENTIFICATION OF FIBER



STANDARD REFERENCES

- IEC 60331-25:1999
- IEC 60332-1-2:2004
- EN 61034-2:2005
- EN 60754-1:2014

CERTIFICATE

PRODUCT APPROVAL



BS 6387:2013 Cat. C-W-Z

Multi-Core, Solid CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath


www.redbooklive.com

Certificate of Product Approval

Certificate Number: 568a Issue: 15

RAMCRO S.p.A.

Via Marzorati 15
20014 Nerviano
Milan
Italy



is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

Product(s)
Cable Types as listed below:
Ramfirecro-F3 FIRE PLANET

Standard(s) (see Appendix for details)
BS 6387:2013
EN 60754-1:2014
EN 61034-2:2005
EN 50200:2015 (Class PH60 & PH120)

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Karen Coull
Signed for BRE Global Ltd.

Karen Coull
Certification Scheme Manager

18 September 2018
Date of Issue

27 October 2003
Date of First issue





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Appendix to Certificate No: 568a

RAMCRO S.p.A.

Product name

Ramfirecro-F3 FIRE PLANET

Nominal csa of conductor (mm ²)	Core Construction	BS 6387	EN 60754-1
1.0 ⁽¹⁾	2, 3 & 4	C, W, Z	<0.5% HCl
1.5 ⁽¹⁾	2, 3 & 4	C, W, Z	<0.5% HCl
2.5 ⁽¹⁾	2, 3 & 4	C, W, Z	<0.5% HCl
4 ⁽¹⁾	2, 3 & 4	C, W, Z	<0.5% HCl

Product name

Ramfirecro-F3 FIRE PLANET

Nominal csa of conductor (mm ²)	Core Construction	BS 6387	EN 60754-1	EN 61034-2	EN 50200
1.5 ⁽²⁾	2, 3 & 4	C, W, Z	<0.5% HCl	>60%	PH 120
2.5 ⁽²⁾	2, 3 & 4	C, W, Z	<0.5% HCl	>60%	PH 120

Uo/U 300/500V

Notes:

1. Stranded conductors only.
2. Solid conductor only.

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Karen Coull
Signed for BRE Global Ltd.

Karen Coull
Certification Scheme Manager

18 September 2018
Date of Issue

27 October 2003
Date of First issue





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**568a/02
issue 15**

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Certificate of Product Approval
 Certificate Number: 568c Issue: 13

RAMCRO S.p.A.
 Via Marzorati 15
 20014 Nerviano MI
 Italy

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

Product(s)
 Cable Types as listed below:
 Ramfirecro-F3 Standard FIRE SUN

Standard(s) (see Appendix for details)
 BS 7629-1:2008
 BS 6387:2013 (CWZ)
 EN 50200:2006 (Class PH30/PH1 20)
 EN 50200:2006 Annex E (30 mins)
 BS 5839-1:2013 (Clause 26.2d Standard)

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

K Coull
 Signed for BRE Global Ltd. Karen Coull Certification Scheme Manager
 6 December 2018 1 June 2006
 Date of Issue Date of First Issue

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Certificate No: 568c **Issue: 13**

LPCB Ref. No.
568c/02

BS 7629-1	BS 6387	EN 50200	EN 50200 Annex E	BS 5839-1 Clause 26.2
Complies (a)	C, W, Z	PH120	30min (a)	Standard (a)
Complies (a)	C, W, Z	PH120	30min (a)	Standard (a)
Complies (a)	C, W, Z	PH120	30min (a)	Standard (a)
Complies (a)	C, W, Z	PH120	30min (a)	Standard (a)

1. Joint and junction connections.
2. Stranded conductor only.
3. In meeting the requirements of BS 7629-1:2008, the Ramfirecro-F3 Standard FIRE SUN cables listed met the requirements for smoke density of EN 61034-2: 2005, the fire resistance requirements in BS 6387:2013 Categories CWZ and achieved less than 0.5% HCl for the outer covering, binder tape & insulation when tested in accordance with EN 50267-2-1: 1999.
4. The duration of 30 min when tested in accordance with EN 50200: 2006 Annex E is achieved by 15 min for the fire and mechanical shock phase and an additional 15 min for the fire, mechanical shock and water phase.
5. The Ramfirecro-F3 Standard FIRE SUN cables listed conform to BS 7629-1:2008, met Class PH120 when tested in accordance with EN 50200:2006 and met the 30min duration when tested in accordance with EN 50200:2006 Annex E and hence met the requirements for a standard fire resistant cable as described in Clause 26.2 of BS 5839-1:2013.

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

K Coull
 Signed for BRE Global Ltd. Karen Coull Certification Scheme Manager
 6 December 2018 1 June 2006
 Date of Issue Date of First Issue

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Certificate of Product Approval

Certificate Number: 568dIssue: 06

RAMCRO S.p.A

Via Marzorati 15
20014 Nerviano MI
ITALY

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

Product(s)	Standard(s) (see Appendix for details)
Cable Types as listed below: Ramfirecro-F3 FIRE SAFE See Certificate Appendix for details	IEC 60331-21:1999 EN 50267-2-1:1999 EN 61034-2:2005

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Signed for BRE Global Ltd.

Karen Coull
 Certification Scheme Manager

20 September 2017
 Date of Issue

01 August 2009
 Date of First Issue

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ificate No: 568d **Issue: 06**

LPCB Ref. No.			
568d/01			
Construction ing drain wire and earth)	IEC 60331-21	EN 50267-2-1	EN 61034-2
2, 3 & 4	Complies	<0.5% HCl	>60%
2, 3 & 4	Complies	<0.5% HCl	>60%
2, 3 & 4	Complies	<0.5% HCl	>60%



**568d/01
issue 06**

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Signed for BRE Global Ltd.

Karen Coull
 Certification Scheme Manager

20 September 2017
 Date of Issue

01 August 2009
 Date of First Issue

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BS 6387:2013 Cat. C-W-Z

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Steel Wire Armour, LSZH-Sheath

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Certificate of Product Approval
 Certificate Number: 568e Issue: 06

RAMCRO S.p.A.
 Via Marzorati
 15 - 20014 Nerviano
 Nerviano
 Milan
 20014
 Italy

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

Product(s)
 Cable Types as listed below:
 Ramfirecro-F3 FIRE GROUND

Standard(s) (see Appendix for details)
 BS 6387:2013 (CWZ)
 EN 60754-1:2014
 EN 61034-2:2005+A1:2013
 EN 60754-2:2014
 EN 60332-3-24:2009
 EN 60332-1-2:2004

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

K. Coull
 Signed for BRE Global Ltd. Karen Coull 11 September 2018 27 May 2016
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Certificate No: 568e

Issue: 06

LPCB Ref. No. 568e/01

BS 6387 (see note 2)	EN 60754-1	EN 61034-2	EN 60754-2	EN 60332-3-24	EN 60332-1-2		
CWZ	<0.5% HCl	>60%	Complies ⁽²⁾	Complies	Complies		
CWZ	<0.5% HCl	>60%	Complies ⁽²⁾	Complies	Complies		
CWZ	<0.5% HCl	>60%	Complies ⁽²⁾	Complies	Complies		
CWZ	<0.5% HCl	>60%	Complies ⁽²⁾	Complies	Complies		
CWZ	<0.5% HCl	>60%	Complies ⁽²⁾	Complies	Complies		
16 ⁽¹⁾	2,3,4 & 5	CWZ	<0.5% HCl	>60%	Complies ⁽²⁾	Complies	Complies
25 ⁽¹⁾	2,3,4 & 5	CWZ	<0.5% HCl	>60%	Complies ⁽²⁾	Complies	Complies

Uo/U 600/1000 V

Notes:

- Class 5 stranded conductor only.
- The Ramfirecro-F3 FIRE GROUND range with diameters greater than 20mm were tested in accordance with clause 17.6.2 and annex I of BS 7846:2015.
- Tested to general method given in EN 60754-2:2014.

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

K. Coull
 Signed for BRE Global Ltd. Karen Coull 11 September 2018 27 May 2016
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**568e/01
 issue 06**

EN 50200:2015 Class PH 120

Multi-Core, Solid or Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

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Certificate of Product Approval
 Certificate Number: 568f Issue: 04

RAMCRO S.p.A
 Via Marzorati 14
 20015 Nerviano MI
 Italy

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

Product(s) Cable Types as listed below: RAMFIRECRO-F3 ENHANCED FIRE MOON	Standard(s) (see Appendix for details) EN 50200:2015 (Class PH120) IEC 60754-1:2014 EN 61034-2:2005+A1:2013
---	---

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Karen Coull
 Signed for LPCB Karen Coull 01 September 2017 10 January 2017
 Certification Scheme Manager Date of Issue Date of First Issue

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ificate No: 568f **Issue: 04**

			LPCB Ref. No.
E MOON			568f/01
Construction (including drain wire and earth)	EN 50200	EN 61034-2	EN 60754-1
2	PH120	>60%	Complies ²⁾
2	PH120	>60%	Complies ²⁾
2	PH120	>60%	Complies ²⁾






**568f/01
issue 04**

2. The RAMFIRECRO F3 ENHANCED FIRE MOON cable listed met the requirements for smoke density of EN 61034-2:2005+A1:2013 and achieved less than 0.5% HCl for the insulation, binder tape and outer covering when tested in accordance with EN 60754-1:2014

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Karen Coull
 Signed for LPCB Karen Coull 01 September 2017 10 January 2017
 Certification Scheme Manager Date of Issue Date of First Issue

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Certificate of Product Approval

Certificate Number: 568g

Issue: 01

RAMCRO S.p.A.

Via Marzorati 15
20014 Nerviano
Milan
Italy

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

Product(s)

Cable Types as listed below:
RAMFIRECRO-F3
Data Cable Category 6
See Certificate Appendix for details

Standard(s) (see Appendix for details)

IEC 60331-21:1999
IEC 60332-1-2:2004
EN 61034-2:2005
EN 60754-1:2014

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Tony Baker
Signed for LPCB

Tony Baker
Certification Scheme Manager

26 July 2017
Date of Issue

26 July 2017
Date of First issue



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Certificate No: 568g

Issue: 01

LPCB Ref. No.

568g/01

IEC 60331-21	IEC 60332-1-2	EN 61034-2	EN 60754-1
Complies	Complies	>60%	<0.5% HCl

et the requirements of IEC 60331-21:1999 when tested at a temperature of 750°C mins cooling time at a voltage rating of 300V.

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Tony Baker
Signed for LPCB

Tony Baker
Certification Scheme Manager

26 July 2017
Date of Issue

26 July 2017
Date of First issue



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BF1345 Rev. 0.3

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568g/01
issue 01

EN 50200:2015 Class PH 30

Multi-Core, Mutlstrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

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Certificate of Product Approval
 Certificate Number: 568i Issue: 02

RAMCRO S.p.A.
 Via Marzorati 15
 20014 Nerviano MI
 Italy

LOSS PREVENTION CERTIFICATION BOARD
LPCB

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

Product(s)
 Cable Types as listed below:
 RAMFIRECRO-F3 FIRE COMET

Standard(s) (see Appendix for details)
 EN 50200:2015 (Class PH30)
 EN 61034-2:2005+A1:2013
 EN 60754-1:2014

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Karen Coull
 Signed for BRE Global Ltd. Karen Coull 27 April 2018 15 February 2018
 Certification Scheme Manager Date of Issue Date of First Issue

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ertificate No: 568i **Issue: 02**

	LPCB Ref. No.		
	568i/01		
Construction	EN 50200	EN 61034-2	EN 60754-1
2	PH 30	>60%	<0.5% HCl
2	PH 30	>60%	<0.5% HCl
2	PH 30	>60%	<0.5% HCl



568i/01
issue 02

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Karen Coull
 Signed for BRE Global Ltd. Karen Coull 27 April 2018 15 February 2018
 Certification Scheme Manager Date of Issue Date of First Issue

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BS 8434-2:2003+A2:2009 (120 min.)

Multi-Core, Solid or Stranded CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath

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Certificate of Product Approval
 Certificate Number: 568j Issue: 03

RAMCRO S.p.A.
 Via Marzorati 15
 20014 Nerviano
 Milan
 Italy

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

Product(s)
 Cable Types as listed below:
 Ramfirecro-F3 FIRE STAR

Standard(s) (see Appendix for details)
 BS 7629-1:2015
 EN 50200:2006 (Class PH120)
 BS 8434-2:2003+A2:2009 (120 mins)
 EN 60332-1-2:2004
 EN 61034-2:2005+A1:2013
 EN 60754-2:2014

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Karen Coull
 Signed for BRE Global Ltd.

Karen Coull
 Certification Scheme Manager

2 August 2018
 Date of Issue

12 April 2018
 Date of First Issue

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Certificate No: 568j

Issue: 03

LPCB Ref. No.					
568j/01					
BS 7629-1	EN 61034-2	EN 50200	EN 50200 Annex E	BS 8434-2	EN 60754-1
Enhanced 120 ⁽²⁾	>80%	PH 120	30 min ⁽⁴⁾	120 min ⁽⁵⁾	<0.5%
Enhanced 120 ⁽²⁾	>80%	PH 120	30 min ⁽⁴⁾	120 min ⁽⁵⁾	<0.5%
Enhanced 120 ⁽²⁾	>80%	PH 120	30 min ⁽⁴⁾	120 min ⁽⁵⁾	<0.5%
Enhanced 120 ⁽²⁾	>80%	PH 120	30 min ⁽⁴⁾	120 min ⁽⁵⁾	<0.5%

3. In meeting the requirements of BS 7629-1:2015, the RAMFIRECRO-F3 FIRE STAR cables listed met the requirements for smoke density of EN 61034-2: 2005+A:2013 and achieved less than 0.5% HCl for the outer covering, binding tape & insulation when tested in accordance with EN 60754-1:2014.
4. The duration of 30 mins when tested in accordance with EN 50200: 2015 Annex E is achieved by 15 min for the fire and mechanical shock phase and an additional 15 min for the fire, mechanical shock and water phase.
5. The duration of 120 min when tested in accordance with BS 8434-2:2003+A2:2009 is achieved by 60 min for the fire and mechanical shock phase and an additional 60 min for the fire, mechanical shock phase and water phase.

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Karen Coull Karen Coull 2 August 2018 12 April 2018
 Signed for BRE Global Ltd. Certification Scheme Manager Date of Issue Date of First Issue

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**568j/01
issue 03**

CEI 20-105 - FG4OHM1 PH30

Multi-Core, Multistrand CU, Silicon Rubber-Insulation, Collective Screen, LSZH-Sheath



ISTITUTO ITALIANO DEL MARCHIO DI QUALITÀ

IMQ S.p.A. - Società con Socio Unico
 E20138 Milano - via Quintilano, 43
 tel. 0250731 (r.a.) - fax 0250991500
 e-mail: info@imq.it - www.imq.it

Rea Milano 1595884
 Registro Imprese Milano 12898410159
 C.F./P.I. 12898410159
 Capitale Sociale € 4.000.000

CA01.00716
 SN.R000FQ

Certificato di approvazione

Approval certificate

PID:
01017100

CID:
CN.R0004L

IMQ, ente di certificazione accreditato, autorizza la ditta *IMQ, accredited certification body, grants to*

RAMCRO SPA
VIA MARZORATI 15
20014 NERVIANO MI
IT - Italy

CA01.00716
 SN.R000FQ

all'uso del marchio *the licence to use the mark*




per i seguenti prodotti *for the following products*

Cavi resistenti al fuoco a bassa tossicità e corrosività (FG4OHM1) *Cables resistant to fire with low toxicity and corrosivity (FG4OHM1)*

Emesso il / Issued on **2017-06-28**

Aggiornato il / Updated on ---

Sostituisce / Replaces ---

This certificate is subjected to the conditions foreseen by Rules "IMQ MARKS - RULES for product certification" and is relevant to the products listed in the annex to this certificate.

Società con Socio Unico
 via Quintilano, 43
 tel. fax 0250991500
 e-mail: www.imq.it

Rea Milano 1595884
 Registro Imprese Milano 12898410159
 C.F./P.I. 12898410159
 Capitale Sociale € 4.000.000

CA01.00716
 SN.R000FQ

Emesso il / Issued on 2017-06-28
 Aggiornato il / Updated on ---
 Sostituisce / Replaces ---

Prodotto | Product

o fuoco a bassa tossicità e corrosività
to fire with low toxicity and corrosivity

Holder

Marchio | Mark




Costruito a | Manufactured at

MI Italy

Copy of this certificate must be available at the manufacturing places listed above

Caratteristiche tecniche

Standards / Technical specifications



CA01.00716

Emesso il / Issued on **2017-06-28**

Aggiornato il / Updated on ---

Sostituisce / Replaces ---

This certificate is subjected to the conditions foreseen by Rules "IMQ MARKS - RULES for product certification" and is relevant to the products listed in the annex to this certificate.

Product/s complying to Standards/Technical specifications:
 CEI 20-105 - Ed. 2011 + V1:2013
 Products meeting the safety objectives of Low Voltage Directive 2014/35/EU (Annex I).

Rapporti | Test Reports

CN16-0002202-01; CN16-0002202-02

Caratteristiche tecniche | Technical characteristics

Tipo di cavo / Type of cable **Cavi elettrici resistenti al fuoco, isolati con mescola in gomma siliconica sotto guaina termoplastica, con schermo, non propaganti l'incendio, senza alogeni per applicazioni in sistemi fissi flame retardant insulated with silicone rubber compound with thermoplastic sheath, screened, halogen free cables for automatic fire detection and fire alarm system**

Sigla di designazione / Type designation **FG4OHM1**
Tensione nominale / Rated voltage **100/100 V**

Articoli (con dettagli) | Articles (with details)

AR.R004PC - stampigliatura / - printing **RAMFIRECRO - F3 - Fire comet**

UL 1424

Multi-Core, PVC HT 105-Insulation, unscreened or with collective screen, Hi-Performance PVC-Sheath

CERTIFICATE OF COMPLIANCE

Certificate Number 20150827-E475091
Report Reference E475091-20150827
Issue Date 2015-AUGUST-27

Issued to: RAMCRO SPA
VIA MARZORATI 15
20014 NERVIANO MILANO ITALY

This is to certify that representative samples of POWER-LIMITED FIRE ALARM CABLE
Power-Limited Fire-Alarm Circuit Cable, Type FPLR

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1424 STANDARD FOR CABLES FOR POWER-LIMITED FIRE-ALARM CIRCUITS

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/about/locations/>



E475091



SINGLE MODE, MULTI MODE FIBER OPTIC

Fiber Optic Fire Resistant

LPCB® www.redbooklive.com

Certificate of Product Approval
 Certificate Number: 568h Issue: 01

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 20014 Nerviano
 Milan
 Italy

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

Product(s)	Standard(s) (see Appendix for details)
Cable Types as listed below: 6 FO Single Mode 6 FO Multi Mode See Certificate Appendix for details	IEC 60331-25:1999 IEC 60332-1-2:2004 EN 61034-2:2005 EN 60754-1:2014

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Tony Baker
 Certification Scheme Manager

26 July 2017
 Date of Issue

26 July 2017
 Date of First Issue

LPCB

UKAS
 PRODUCT
 CERTIFICATION
 0007

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ificate No: 568h			Issue: 01	
LPCB Ref. No.			568h/01	
IEC 60331-25	IEC 60332-1-2	EN 61034-2	EN 60754-1	
Complies	Complies	>60%	<0.5% HCl	

LPCB Ref. No.			568h/02	
IEC 60331-25	IEC 60332-1-2	EN 61034-2	EN 60754-1	
Complies	Complies	>60%	<0.5% HCl	

Notes:

- The 6 FO Single Mode & 6 FO Multi Mode cables met the requirements of IEC 60331-25:1999 when tested at a temperature of 750°C for a duration of 90mins + 15mins cooling time.

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Tony Baker
 Certification Scheme Manager

26 July 2017
 Date of Issue

26 July 2017
 Date of First Issue

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QD 06/01

Edited by Sales Director on April 2019

Dr. Carlo Croci

Approved by AQ: PC



INSTRUMENTATION CABLE

INSTRUMENTATION CONTENTS



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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



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

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



PAS 5308-1:2009 Part 1 Type 1

PE/CAM/PVC

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

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

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:

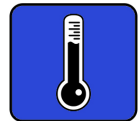
-5° C up to +50° C

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 ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250HEADX-OIL	2x2x0,50	8,5	83	37,5
MAC0450HEADX-OIL	4x2x0,50	9,8	131	37,5
MAC0650HEADX-OIL	6x2x0,50	12,3	201	37,5
MAC0850HEADX-OIL	8x2x0,50	13,5	250	37,5
MAC1050HEADX-OIL	10x2x0,50	15,6	305	37,5
MAC1250HEADX-OIL	12x2x0,50	16,1	350	37,5
MAC1650HEADX-OIL	16x2x0,50	18,1	454	37,5
MAC2450HEADX-OIL	24x2x0,50	22,9	685	37,5
MAC0275HEADX-OIL	2x2x0,75	9,1	96	25,5
MAC0475HEADX-OIL	4x2x0,75	10,5	154	25,5
MAC0675HEADX-OIL	6x2x0,75	13,2	236	25,5
MAC0875HEADX-OIL	8x2x0,75	14,5	296	25,5
MAC1075HEADX-OIL	10x2x0,75	17,0	371	25,5
MAC1275HEADX-OIL	12x2x0,75	17,5	427	25,5
MAC1675HEADX-OIL	16x2x0,75	20,0	574	25,5
MAC2475HEADX-OIL	24x2x0,75	24,7	820	25,5
MAC0210HEADX-OIL	2x2x1,00	10,3	116	18,8
MAC0410HEADX-OIL	4x2x1,00	12,6	214	18,8
MAC0610HEADX-OIL	6x2x1,00	15,1	298	18,8
MAC0810HEADX-OIL	8x2x1,00	16,8	384	18,8
MAC1010HEADX-OIL	10x2x1,00	20,1	502	18,8
MAC1210HEADX-OIL	12x2x1,00	20,7	576	18,8
MAC1610HEADX-OIL	16x2x1,00	23,0	730	18,8
MAC2410HEADX-OIL	24x2x1,00	28,4	1046	18,8
MAC0215HEADX-OIL	2x2x1,50	10,5	136	12,6
MAC0415HEADX-OIL	4x2x1,50	12,9	249	12,6
MAC0615HEADX-OIL	6x2x1,50	15,4	349	12,6
MAC0815HEADX-OIL	8x2x1,50	17,2	453	12,6
MAC1015HEADX-OIL	10x2x1,50	20,5	588	12,6
MAC1215HEADX-OIL	12x2x1,50	21,2	678	12,6
MAC1615HEADX-OIL	16x2x1,50	23,5	867	12,6
MAC2415HEADX-OIL	24x2x1,50	29,1	1252	12,6
MAC0215HEADX-OIL	2x2x,50	12,6	202	7,7
MAC0415HEADX-OIL	4x2x,50	14,6	339	7,7
MAC0615HEADX-OIL	6x2x,50	17,8	492	7,7
MAC0815HEADX-OIL	8x2x,50	20,2	660	7,7
MAC1015HEADX-OIL	10x2x,50	23,4	812	7,7
MAC1215HEADX-OIL	12x2x,50	24,2	942	7,7
MAC1615HEADX-OIL	16x2x,50	26,9	1213	7,7
MAC2415HEADX-OIL	24x2x,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 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/CAM/PVC/SWA/PVC

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

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

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 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 2

PE/IAM/CAM/PVC/SWA/PVC

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250AEADX-OIL	2x2x0,50	8,5	83	37,5
MAC0450AEADX-OIL	4x2x0,50	9,8	131	37,5
MAC0650AEADX-OIL	6x2x0,50	12,3	201	37,5
MAC0850AEADX-OIL	8x2x0,50	13,5	250	37,5
MAC1050AEADX-OIL	10x2x0,50	15,6	305	37,5
MAC1250AEADX-OIL	12x2x0,50	16,1	350	37,5
MAC1650AEADX-OIL	16x2x0,50	18,1	454	37,5
MAC2450AEADX-OIL	24x2x0,50	22,9	685	37,5
MAC0275AEADX-OIL	2x2x0,75	9,1	96	25,5
MAC0475AEADX-OIL	4x2x0,75	10,5	154	25,5
MAC0675AEADX-OIL	6x2x0,75	13,2	236	25,5
MAC0875AEADX-OIL	8x2x0,75	14,5	296	25,5
MAC1075AEADX-OIL	10x2x0,75	17,0	371	25,5
MAC1275AEADX-OIL	12x2x0,75	17,5	427	25,5
MAC1675AEADX-OIL	16x2x0,75	20,0	574	25,5
MAC2475AEADX-OIL	24x2x0,75	24,7	820	25,5
MAC0210AEADX-OIL	2x2x1,00	10,3	116	18,8
MAC0410AEADX-OIL	4x2x1,00	12,6	214	18,8
MAC0610AEADX-OIL	6x2x1,00	15,1	298	18,8
MAC0810AEADX-OIL	8x2x1,00	16,8	384	18,8
MAC1010AEADX-OIL	10x2x1,00	20,1	502	18,8
MAC1210AEADX-OIL	12x2x1,00	20,7	576	18,8
MAC1610AEADX-OIL	16x2x1,00	23,0	730	18,8
MAC2410AEADX-OIL	24x2x1,00	28,4	1046	18,8
MAC0215AEADX-OIL	2x2x1,50	10,5	136	12,6
MAC0415AEADX-OIL	4x2x1,50	12,9	249	12,6
MAC0615AEADX-OIL	6x2x1,50	15,4	349	12,6
MAC0815AEADX-OIL	8x2x1,50	17,2	453	12,6
MAC1015AEADX-OIL	10x2x1,50	20,5	588	12,6
MAC1215AEADX-OIL	12x2x1,50	21,2	678	12,6
MAC1615AEADX-OIL	16x2x1,50	23,5	867	12,6
MAC2415AEADX-OIL	24x2x1,50	29,1	1252	12,6
MAC0215AEADX-OIL	2x2x,50	12,6	202	7,7
MAC0415AEADX-OIL	4x2x,50	14,6	339	7,7
MAC0615AEADX-OIL	6x2x,50	17,8	492	7,7
MAC0815AEADX-OIL	8x2x,50	20,2	660	7,7
MAC1015AEADX-OIL	10x2x,50	23,4	812	7,7
MAC1215AEADX-OIL	12x2x,50	24,2	942	7,7
MAC1615AEADX-OIL	16x2x,50	26,9	1213	7,7
MAC2415AEADX-OIL	24x2x2,50	33,6	1782	7,7

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

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



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.



ERC

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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PAS 5308-2:2009 Part 2 Type 1

PVC/CAM/PVC

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

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

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 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 1

PVC/IAM/CAM/PVC

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

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

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:

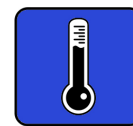
-5° C up to +50° C

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

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

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

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/IAM/CAM/PVC/SWA/PVC

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
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 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 3

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

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

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

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 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 3

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

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

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



Assessed to ISO 9001:2015
LPCB Cert. No 568



CERTIFIED MANAGEMENT SYSTEM
BS OHSAS 18001



CERTIFIED MANAGEMENT SYSTEM
ISO 14001



2002/95/EC

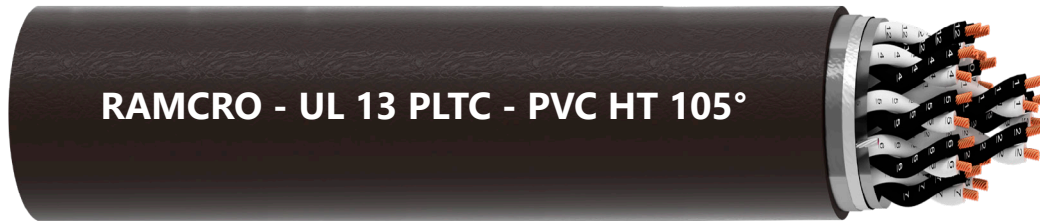


UL 13

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:

300 V



UL 13 - PLTC Cable

PVC 105°C - Overall screened

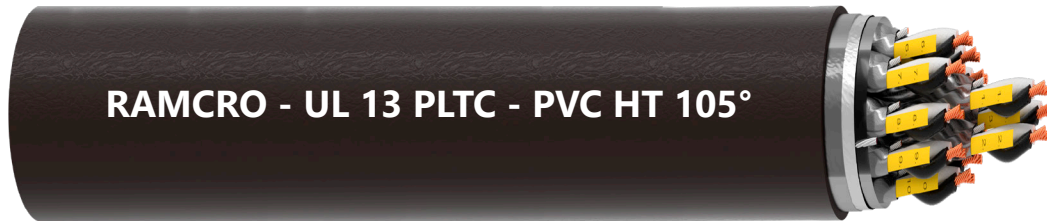
These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685.

RAMCRO CODE	FORMATION (mm ²)	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:

300 V



UL 13 - PLTC Cable

PVC 105°C - Individual screened

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

RAMCRO CODE	FORMATION (mm ²)	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:

300 V



UL 13 - PLTC Cable

PVC 105°C - Collective screened with amour

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

RAMCRO CODE	FORMATION (mm ²)	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:

300 V



UL 13 - PLTC Cable

PVC 105°C - Individual and collective screened with armour

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

RAMCRO CODE	FORMATION (mm ²)	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:

300 V



UL 13 - PLTC Cable

XLPE - Overall screened

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

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

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:

300 V



UL 13 - PLTC Cable

XLPE - Overall screened

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

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

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:

300 V



UL 13 - PLTC Cable

XLPE - Individual screened

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

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

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

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:

300 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 ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0106AEEXN-UL13	1x2x20AWG	9,3	169	34,6
MAS0206AEEXN-UL13	2x2x20AWG	15,5	375	34,6
MAS0406AEEXN-UL13	4x2x20AWG	16,7	443	34,6
MAS0606AEEXN-UL13	6x2x20AWG	18,9	556	34,6
MAS0806AEEXN-UL13	8x2x20AWG	19,9	622	34,6
MAS1006AEEXN-UL13	10x2x20AWG	22,4	813	34,6
MAS1206AEEXN-UL13	12x2x20AWG	22,9	860	34,6
MAS1606AEEXN-UL13	16x2x20AWG	25,5	1050	34,6
MAS2406AEEXN-UL13	24x2x20AWG	29,9	1462	34,6
MAS0105AEEXN-UL13	1x2x18AWG	13,5	297	21,8
MAS0205AEEXN-UL13	2x2x18AWG	16,3	415	21,8
MAS0405AEEXN-UL13	4x2x18AWG	18,2	529	21,8
MAS0605AEEXN-UL13	6x2x18AWG	20,1	638	21,8
MAS0805AEEXN-UL13	8x2x18AWG	21,3	722	21,8
MAS1005AEEXN-UL13	10x2x18AWG	24,5	981	21,8
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

Insulation Resistance @ 20°C:

> 1000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

300 V



UL 13 - PLTC Cable

XLPE - Individual and Collective screened with armour

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

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

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:

300 V



UL 13 - PLTC Cable

SIL - Overall screened

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0106HEESN-UL13	1x2x20AWG	6,9	58	34,6
MAS0206HEESN-UL13	2x2x20AWG	9,2	95	34,6
MAS0406HEESN-UL13	4x2x20AWG	14,5	270	34,6
MAS0606HEESN-UL13	6x2x20AWG	16,6	350	34,6
MAS0806HEESN-UL13	8x2x20AWG	17,8	418	34,6
MAS1006HEESN-UL13	10x2x20AWG	20,1	499	34,6
MAS1206HEESN-UL13	12x2x20AWG	20,6	556	34,6
MAS1606HEESN-UL13	16x2x20AWG	22,5	683	34,6
MAS2406HEESN-UL13	24x2x20AWG	27,6	981	34,6
MAS0105HEESN-UL13	1x2x18AWG	7,4	69	21,8
MAS0205HEESN-UL13	2x2x18AWG	13,8	227	21,8
MAS0405HEESN-UL13	4x2x18AWG	15,4	315	21,8
MAS0605HEESN-UL13	6x2x18AWG	17,6	414	21,8
MAS0805HEESN-UL13	8x2x18AWG	19,1	500	21,8
MAS1005HEESN-UL13	10x2x18AWG	21,5	601	21,8
MAS1205HEESN-UL13	12x2x18AWG	22,1	676	21,8
MAS1605HEESN-UL13	16x2x18AWG	24,2	837	21,8
MAS2405HEESN-UL13	24x2x18AWG	29,8	1210	21,8
MAS0105HEESN-UL13	1x2x16AWG	8,0	84	13,7
MAS0205HEESN-UL13	2x2x16AWG	14,7	264	13,7
MAS0405HEESN-UL13	4x2x16AWG	16,5	380	13,7
MAS0605HEESN-UL13	6x2x16AWG	19,0	506	13,7
MAS0805HEESN-UL13	8x2x16AWG	20,6	619	13,7
MAS1005HEESN-UL13	10x2x16AWG	23,3	748	13,7
MAS1205HEESN-UL13	12x2x16AWG	24,0	848	13,7
MAS1605HEESN-UL13	16x2x16AWG	26,8	1095	13,7
MAS2405HEESN-UL13	24x2x16AWG	32,5	1541	13,7
MAS0101HEESN-UL13	1x2x14AWG	8,8	107	8,6
MAS0201HEESN-UL13	2x2x14AWG	15,8	318	8,6
MAS0401HEESN-UL13	4x2x14AWG	17,9	475	8,6
MAS0601HEESN-UL13	6x2x14AWG	20,7	644	8,6
MAS0801HEESN-UL13	8x2x14AWG	22,5	798	8,6
MAS1001HEESN-UL13	10x2x14AWG	26,1	1003	8,6
MAS1201HEESN-UL13	12x2x14AWG	26,9	1142	8,6
MAS1601HEESN-UL13	16x2x14AWG	29,6	1437	8,6
MAS2401HEESN-UL13	24x2x14AWG	36,4	2091	8,6
MAS0152HEESN-UL13	1x2x12AWG	8,8	107	5,4
MAS0252HEESN-UL13	2x2x12AWG	15,8	318	5,4
MAS0452HEESN-UL13	4x2x12AWG	17,9	475	5,4
MAS0652HEESN-UL13	6x2x12AWG	20,7	644	5,4
MAS0852HEESN-UL13	8x2x12AWG	22,5	798	5,4
MAS1052HEESN-UL13	10x2x12AWG	26,1	1003	5,4
MAS1252HEESN-UL13	12x2x12AWG	26,9	1142	5,4
MAS1652HEESN-UL13	16x2x12AWG	29,6	1437	5,4
MAS2452HEESN-UL13	24x2x12AWG	36,4	2091	5,4

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

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



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 ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0206HEESN-UL13	2x2x20AWG	9,5	105	34,6
MAC0406HEESN-UL13	4x2x20AWG	14,8	292	34,6
MAC0606HEESN-UL13	6x2x20AWG	16,9	381	34,6
MAC0806HEESN-UL13	8x2x20AWG	18,2	458	34,6
MAC1006HEESN-UL13	10x2x20AWG	20,5	549	34,6
MAC1206HEESN-UL13	12x2x20AWG	21,1	616	34,6
MAC1606HEESN-UL13	16x2x20AWG	23,1	760	34,6
MAC2006HEESN-UL13	20x2x20AWG	26,0	944	34,6
MAC2406HEESN-UL13	24x2x20AWG	28,3	1096	34,6
MAC0205HEESN-UL13	2x2x18AWG	14,0	240	21,8
MAC0405HEESN-UL13	4x2x18AWG	15,6	339	21,8
MAC0605HEESN-UL13	6x2x18AWG	18,0	449	21,8
MAC0805HEESN-UL13	8x2x18AWG	19,5	546	21,8
MAC1005HEESN-UL13	10x2x18AWG	22,0	658	21,8
MAC1205HEESN-UL13	12x2x18AWG	22,6	743	21,8
MAC1605HEESN-UL13	16x2x18AWG	24,8	925	21,8
MAC2005HEESN-UL13	20x2x18AWG	28,0	1150	21,8
MAC2405HEESN-UL13	24x2x18AWG	30,5	1340	21,8
MAC0205HEESN-UL13	2x2x16AWG	14,9	277	13,7
MAC0405HEESN-UL13	4x2x16AWG	16,7	404	13,7
MAC0605HEESN-UL13	6x2x16AWG	19,3	541	13,7
MAC0805HEESN-UL13	8x2x16AWG	21,0	665	13,7
MAC1005HEESN-UL13	10x2x16AWG	23,8	805	13,7
MAC1205HEESN-UL13	12x2x16AWG	24,5	915	13,7
MAC1605HEESN-UL13	16x2x16AWG	27,4	1183	13,7
MAC2005HEESN-UL13	20x2x16AWG	30,4	1429	13,7
MAC2405HEESN-UL13	24x2x16AWG	33,2	1672	13,7
MAC0201HEESN-UL13	2x2x14AWG	16,1	333	8,6
MAC0401HEESN-UL13	4x2x14AWG	18,1	502	8,6
MAC0601HEESN-UL13	6x2x14AWG	21,1	683	8,6
MAC0801HEESN-UL13	8x2x14AWG	22,9	848	8,6
MAC1001HEESN-UL13	10x2x14AWG	26,6	1067	8,6
MAC1201HEESN-UL13	12x2x14AWG	27,4	1217	8,6
MAC1601HEESN-UL13	16x2x14AWG	30,1	1537	8,6
MAC2001HEESN-UL13	20x2x14AWG	33,5	1866	8,6
MAC2401HEESN-UL13	24x2x14AWG	37,2	2239	8,6
MAC0252HEESN-UL13	2x2x12AWG	17,5	412	5,4
MAC0452HEESN-UL13	4x2x12AWG	19,9	644	5,4
MAC0652HEESN-UL13	6x2x12AWG	23,2	889	5,4
MAC0852HEESN-UL13	8x2x12AWG	25,9	1149	5,4
MAC1052HEESN-UL13	10x2x12AWG	29,5	1403	5,4
MAC1252HEESN-UL13	12x2x12AWG	30,4	1614	5,4
MAC1652HEESN-UL13	16x2x12AWG	33,5	2055	5,4
MAC2052HEESN-UL13	20x2x12AWG	37,9	2555	5,4
MAC2452HEESN-UL13	24x2x12AWG	41,5	3010	5,4

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 - UL 13 PLTC - Silicon Rubber



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:

300 V



UL 13 - PLTC Cable

SIL - Overall screened with armour

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0106AEESN-UL13	1x2x20AWG	14,3	324	34,6
MAS0206AEESN-UL13	2x2x20AWG	16,9	440	34,6
MAS0406AEESN-UL13	4x2x20AWG	18,8	567	34,6
MAS0606AEESN-UL13	6x2x20AWG	20,9	688	34,6
MAS0806AEESN-UL13	8x2x20AWG	22,9	885	34,6
MAS1006AEESN-UL13	10x2x20AWG	26,1	1095	34,6
MAS1206AEESN-UL13	12x2x20AWG	26,7	1169	34,6
MAS1606AEESN-UL13	16x2x20AWG	29,2	1484	34,6
MAS2406AEESN-UL13	24x2x20AWG	34,8	1998	34,6
MAS0105AEESN-UL13	1x2x18AWG	15,0	361	21,8
MAS0205AEESN-UL13	2x2x18AWG	18,1	508	21,8
MAS0405AEESN-UL13	4x2x18AWG	19,7	629	21,8
MAS0605AEESN-UL13	6x2x18AWG	22,6	876	21,8
MAS0805AEESN-UL13	8x2x18AWG	24,6	1036	21,8
MAS1005AEESN-UL13	10x2x18AWG	27,5	1239	21,8
MAS1205AEESN-UL13	12x2x18AWG	28,8	1464	21,8
MAS1605AEESN-UL13	16x2x18AWG	30,9	1696	21,8
MAS2405AEESN-UL13	24x2x18AWG	37,8	2510	21,8
MAS0105AEESN-UL13	1x2x16AWG	15,6	393	13,7
MAS0205AEESN-UL13	2x2x16AWG	19,0	564	13,7
MAS0405AEESN-UL13	4x2x16AWG	20,8	716	13,7
MAS0605AEESN-UL13	6x2x16AWG	24,5	1039	13,7
MAS0805AEESN-UL13	8x2x16AWG	26,6	1230	13,7
MAS1005AEESN-UL13	10x2x16AWG	30,0	1577	13,7
MAS1205AEESN-UL13	12x2x16AWG	30,7	1699	13,7
MAS1605AEESN-UL13	16x2x16AWG	33,6	2044	13,7
MAS2405AEESN-UL13	24x2x16AWG	40,5	2954	13,7
MAS0101AEESN-UL13	1x2x14AWG	16,4	438	8,6
MAS0201AEESN-UL13	2x2x14AWG	20,1	642	8,6
MAS0401AEESN-UL13	4x2x14AWG	22,9	943	8,6
MAS0601AEESN-UL13	6x2x14AWG	26,8	1259	8,6
MAS0801AEESN-UL13	8x2x14AWG	29,3	1600	8,6
MAS1001AEESN-UL13	10x2x14AWG	32,9	1928	8,6
MAS1201AEESN-UL13	12x2x14AWG	33,7	2094	8,6
MAS1601AEESN-UL13	16x2x14AWG	37,6	2730	8,6
MAS2401AEESN-UL13	24x2x14AWG	45,0	3725	8,6
MAS0152AEESN-UL13	1x2x12AWG	17,8	527	5,4
MAS0252AEESN-UL13	2x2x12AWG	21,6	750	5,4
MAS0452AEESN-UL13	4x2x12AWG	25,6	1198	5,4
MAS0652AEESN-UL13	6x2x12AWG	29,6	1661	5,4
MAS0852AEESN-UL13	8x2x12AWG	32,2	1996	5,4
MAS1052AEESN-UL13	10x2x12AWG	37,1	2603	5,4
MAS1252AEESN-UL13	12x2x12AWG	38,0	2839	5,4
MAS1652AEESN-UL13	16x2x12AWG	41,0	3380	5,4
MAS2452AEESN-UL13	24x2x12AWG	49,3	4667	5,4

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.



E345186



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:

300 V



UL 13 - PLTC Cable

SIL - Individual and Overall screened with armour

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0206AEESN-UL13	2x2x20AWG	17,1	457	34,6
MAC0406AEESN-UL13	4x2x20AWG	19,1	595	34,6
MAC0606AEESN-UL13	6x2x20AWG	21,2	727	34,6
MAC0806AEESN-UL13	8x2x20AWG	23,3	937	34,6
MAC1006AEESN-UL13	10x2x20AWG	26,6	1160	34,6
MAC1206AEESN-UL13	12x2x20AWG	27,2	1243	34,6
MAC1606AEESN-UL13	16x2x20AWG	29,8	1582	34,6
MAC2006AEESN-UL13	20x2x20AWG	32,8	1867	34,6
MAC2406AEESN-UL13	24x2x20AWG	36,4	2338	34,6
MAC0205AEESN-UL13	2x2x18AWG	18,3	527	21,8
MAC0405AEESN-UL13	4x2x18AWG	20,0	660	21,8
MAC0605AEESN-UL13	6x2x18AWG	23,0	921	21,8
MAC0805AEESN-UL13	8x2x18AWG	25,5	1126	21,8
MAC1005AEESN-UL13	10x2x18AWG	28,7	1443	21,8
MAC1205AEESN-UL13	12x2x18AWG	29,4	1549	21,8
MAC1605AEESN-UL13	16x2x18AWG	31,5	1805	21,8
MAC2005AEESN-UL13	20x2x18AWG	36,0	2377	21,8
MAC2405AEESN-UL13	24x2x18AWG	38,5	2672	21,8
MAC0205AEESN-UL13	2x2x16AWG	19,2	583	13,7
MAC0405AEESN-UL13	4x2x16AWG	21,1	747	13,7
MAC0605AEESN-UL13	6x2x16AWG	24,9	1085	13,7
MAC0805AEESN-UL13	8x2x16AWG	27,0	1288	13,7
MAC1005AEESN-UL13	10x2x16AWG	30,5	1651	13,7
MAC1205AEESN-UL13	12x2x16AWG	31,2	1785	13,7
MAC1605AEESN-UL13	16x2x16AWG	34,2	2153	13,7
MAC2005AEESN-UL13	20x2x16AWG	38,4	2757	13,7
MAC2405AEESN-UL13	24x2x16AWG	41,2	3117	13,7
MAC0201AEESN-UL13	2x2x14AWG	20,4	662	8,6
MAC0401AEESN-UL13	4x2x14AWG	23,2	977	8,6
MAC0601AEESN-UL13	6x2x14AWG	27,1	1309	8,6
MAC0801AEESN-UL13	8x2x14AWG	29,7	1666	8,6
MAC1001AEESN-UL13	10x2x14AWG	33,4	2010	8,6
MAC1201AEESN-UL13	12x2x14AWG	34,2	2188	8,6
MAC1601AEESN-UL13	16x2x14AWG	38,2	2854	8,6
MAC2001AEESN-UL13	20x2x14AWG	41,6	3324	8,6
MAC2401AEESN-UL13	24x2x14AWG	45,7	3905	8,6
MAC0252AEESN-UL13	2x2x12AWG	22,5	872	5,4
MAC0452AEESN-UL13	4x2x12AWG	25,9	1236	5,4
MAC0652AEESN-UL13	6x2x12AWG	30,0	1717	5,4
MAC0852AEESN-UL13	8x2x12AWG	32,7	2068	5,4
MAC1052AEESN-UL13	10x2x12AWG	37,6	2695	5,4
MAC1252AEESN-UL13	12x2x12AWG	38,5	2944	5,4
MAC1652AEESN-UL13	16x2x12AWG	41,6	3515	5,4
MAC2052AEESN-UL13	20x2x12AWG	46,5	4253	5,4
MAC2452AEESN-UL13	24x2x12AWG	50,1	4863	5,4

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:

300 V



UL 13 - PLTC Cable

Mica Tape + XLPE Overall screened

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0106HEEON-UL13	1x2x20AWG	7,5	66	34,6
MAS0206HEEON-UL13	2x2x20AWG	14,4	229	34,6
MAS0406HEEON-UL13	4x2x20AWG	16,1	312	34,6
MAS0606HEEON-UL13	6x2x20AWG	18,6	406	34,6
MAS0806HEEON-UL13	8x2x20AWG	20,1	487	34,6
MAS1006HEEON-UL13	10x2x20AWG	22,8	584	34,6
MAS1206HEEON-UL13	12x2x20AWG	23,5	651	34,6
MAS1606HEEON-UL13	16x2x20AWG	26,2	833	34,6
MAS2406HEEON-UL13	24x2x20AWG	31,7	1152	34,6
MAS0105HEEON-UL13	1x2x18AWG	7,9	76	21,8
MAS0205HEEON-UL13	2x2x18AWG	15,2	256	21,8
MAS0405HEEON-UL13	4x2x18AWG	17,1	357	21,8
MAS0605HEEON-UL13	6x2x18AWG	19,7	471	21,8
MAS0805HEEON-UL13	8x2x18AWG	21,4	569	21,8
MAS1005HEEON-UL13	10x2x18AWG	24,3	685	21,8
MAS1205HEEON-UL13	12x2x18AWG	25,6	802	21,8
MAS1605HEEON-UL13	16x2x18AWG	28,0	989	21,8
MAS2405HEEON-UL13	24x2x18AWG	34,0	1379	21,8
MAS0105HEEON-UL13	1x2x16AWG	37,4	1754	13,7
MAS0205HEEON-UL13	2x2x16AWG	16,1	294	13,7
MAS0405HEEON-UL13	4x2x16AWG	18,2	422	13,7
MAS0605HEEON-UL13	6x2x16AWG	21,2	563	13,7
MAS0805HEEON-UL13	8x2x16AWG	23,1	688	13,7
MAS1005HEEON-UL13	10x2x16AWG	26,8	866	13,7
MAS1205HEEON-UL13	12x2x16AWG	27,6	976	13,7
MAS1605HEEON-UL13	16x2x16AWG	30,3	1214	13,7
MAS2405HEEON-UL13	24x2x16AWG	37,4	1754	13,7
MAS0101HEEON-UL13	1x2x14AWG	9,3	113	8,6
MAS0201HEEON-UL13	2x2x14AWG	17,4	349	8,6
MAS0401HEEON-UL13	4x2x14AWG	19,7	518	8,6
MAS0601HEEON-UL13	6x2x14AWG	23	701	8,6
MAS0801HEEON-UL13	8x2x14AWG	25,7	898	8,6
MAS1001HEEON-UL13	10x2x14AWG	29,2	1090	8,6
MAS1201HEEON-UL13	12x2x14AWG	30,1	1238	8,6
MAS1601HEEON-UL13	16x2x14AWG	33,2	1556	8,6
MAS2401HEEON-UL13	24x2x14AWG	41,1	2260	8,6
MAS0152HEEON-UL13	1x2x12AWG	14,1	261	5,4
MAS0252HEEON-UL13	2x2x12AWG	18,9	426	5,4
MAS0452HEEON-UL13	4x2x12AWG	21,6	653	5,4
MAS0652HEEON-UL13	6x2x12AWG	25,9	929	5,4
MAS0852HEEON-UL13	8x2x12AWG	28,3	1156	5,4
MAS1052HEEON-UL13	10x2x12AWG	32,3	1409	5,4
MAS1252HEEON-UL13	12x2x12AWG	33,4	1613	5,4
MAS1652HEEON-UL13	16x2x12AWG	37,3	2090	5,4
MAS2452HEEON-UL13	24x2x12AWG	46,2	3044	5,4

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 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
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:	300 V



UL 13 - PLTC Cable

Mica Tape + XLPE Individual and Overall screened

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0206HEEON-UL13	2x2x20AWG	14,6	242	34,6
MAC0406HEEON-UL13	4x2x20AWG	16,4	337	34,6
MAC0606HEEON-UL13	6x2x20AWG	19,0	441	34,6
MAC0806HEEON-UL13	8x2x20AWG	20,6	533	34,6
MAC1006HEEON-UL13	10x2x20AWG	23,3	641	34,6
MAC1206HEEON-UL13	12x2x20AWG	24,0	719	34,6
MAC1606HEEON-UL13	16x2x20AWG	26,8	923	34,6
MAC2006HEEON-UL13	20x2x20AWG	29,7	1105	34,6
MAC2406HEEON-UL13	24x2x20AWG	32,5	1284	34,6
MAC0205HEEON-UL13	2x2x18AWG	15,4	269	21,8
MAC0405HEEON-UL13	4x2x18AWG	17,4	382	21,8
MAC0605HEEON-UL13	6x2x18AWG	20,1	506	21,8
MAC0805HEEON-UL13	8x2x18AWG	21,9	615	21,8
MAC1005HEEON-UL13	10x2x18AWG	24,8	743	21,8
MAC1205HEEON-UL13	12x2x18AWG	26,1	870	21,8
MAC1605HEEON-UL13	16x2x18AWG	28,6	1078	21,8
MAC2005HEEON-UL13	20x2x18AWG	31,8	1296	21,8
MAC2405HEEON-UL13	24x2x18AWG	35,3	1554	21,8
MAC0205HEEON-UL13	2x2x16AWG	16,4	309	13,7
MAC0405HEEON-UL13	4x2x16AWG	18,5	449	13,7
MAC0605HEEON-UL13	6x2x16AWG	21,6	602	13,7
MAC0805HEEON-UL13	8x2x16AWG	23,5	739	13,7
MAC1005HEEON-UL13	10x2x16AWG	27,3	930	13,7
MAC1205HEEON-UL13	12x2x16AWG	28,1	1052	13,7
MAC1605HEEON-UL13	16x2x16AWG	30,9	1314	13,7
MAC2005HEEON-UL13	20x2x16AWG	34,9	1629	13,7
MAC2405HEEON-UL13	24x2x16AWG	38,1	1903	13,7
MAC0201HEEON-UL13	2x2x14AWG	17,6	364	8,6
MAC0401HEEON-UL13	4x2x14AWG	20,0	545	8,6
MAC0601HEEON-UL13	6x2x14AWG	23,4	740	8,6
MAC0801HEEON-UL13	8x2x14AWG	26,1	950	8,6
MAC1001HEEON-UL13	10x2x14AWG	29,8	1154	8,6
MAC1201HEEON-UL13	12x2x14AWG	30,7	1314	8,6
MAC1601HEEON-UL13	16x2x14AWG	33,8	1655	8,6
MAC2001HEEON-UL13	20x2x14AWG	38,2	2055	8,6
MAC2401HEEON-UL13	24x2x14AWG	41,9	2409	8,6
MAC0252HEEON-UL13	2x2x12AWG	19,2	442	5,4
MAC0452HEEON-UL13	4x2x12AWG	21,9	682	5,4
MAC0652HEEON-UL13	6x2x12AWG	26,3	973	5,4
MAC0852HEEON-UL13	8x2x12AWG	28,7	1213	5,4
MAC1052HEEON-UL13	10x2x12AWG	32,8	1480	5,4
MAC1252HEEON-UL13	12x2x12AWG	33,9	1697	5,4
MAC1652HEEON-UL13	16x2x12AWG	37,9	2201	5,4
MAC2052HEEON-UL13	20x2x12AWG	42,4	2678	5,4
MAC2452HEEON-UL13	24x2x12AWG	47,0	3208	5,4

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 Amour

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:

300 V



UL 13 - PLTC Cable

Mica Tape + XLPE Overall screened with armour

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

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

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

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:

300 V



UL 13 - PLTC Cable

Mica Tape + XLPE Individual Overall screened with armour

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0206AEEON-UL13	2x2x20AWG	19,0	543	34,6
MAC0406AEEON-UL13	4x2x20AWG	20,8	674	34,6
MAC0606AEEON-UL13	6x2x20AWG	24,5	976	34,6
MAC0806AEEON-UL13	8x2x20AWG	26,6	1145	34,6
MAC1006AEEON-UL13	10x2x20AWG	30,1	1470	34,6
MAC1206AEEON-UL13	12x2x20AWG	30,7	1572	34,6
MAC1606AEEON-UL13	16x2x20AWG	33,6	1873	34,6
MAC2006AEEON-UL13	20x2x20AWG	37,8	2406	34,6
MAC2406AEEON-UL13	24x2x20AWG	40,5	2698	34,6
MAC0205AEEON-UL13	2x2x18AWG	19,8	585	21,8
MAC0405AEEON-UL13	4x2x18AWG	21,7	738	21,8
MAC0605AEEON-UL13	6x2x18AWG	26,2	1105	21,8
MAC0805AEEON-UL13	8x2x18AWG	27,9	1264	21,8
MAC1005AEEON-UL13	10x2x18AWG	31,6	1625	21,8
MAC1205AEEON-UL13	12x2x18AWG	32,9	1796	21,8
MAC1605AEEON-UL13	16x2x18AWG	36,7	2334	21,8
MAC2005AEEON-UL13	20x2x18AWG	39,9	2683	21,8
MAC2405AEEON-UL13	24x2x18AWG	43,3	3085	21,8
MAC0205AEEON-UL13	2x2x16AWG	20,7	644	13,7
MAC0405AEEON-UL13	4x2x16AWG	23,6	935	13,7
MAC0605AEEON-UL13	6x2x16AWG	27,6	1242	13,7
MAC0805AEEON-UL13	8x2x16AWG	30,2	1575	13,7
MAC1005AEEON-UL13	10x2x16AWG	34,0	1895	13,7
MAC1205AEEON-UL13	12x2x16AWG	36,2	2285	13,7
MAC1605AEEON-UL13	16x2x16AWG	39,0	2663	13,7
MAC2005AEEON-UL13	20x2x16AWG	42,9	3144	13,7
MAC2405AEEON-UL13	24x2x16AWG	46,7	3611	13,7
MAC0201AEEON-UL13	2x2x14AWG	22,7	826	8,6
MAC0401AEEON-UL13	4x2x14AWG	26,1	1141	8,6
MAC0601AEEON-UL13	6x2x14AWG	30,2	1574	8,6
MAC0801AEEON-UL13	8x2x14AWG	32,9	1875	8,6
MAC1001AEEON-UL13	10x2x14AWG	37,8	2456	8,6
MAC1201AEEON-UL13	12x2x14AWG	38,7	2655	8,6
MAC1601AEEON-UL13	16x2x14AWG	41,9	3126	8,6
MAC2001AEEON-UL13	20x2x14AWG	46,8	3766	8,6
MAC2401AEEON-UL13	24x2x14AWG	50,4	4277	8,6
MAC0252AEEON-UL13	2x2x12AWG	24,7	981	5,4
MAC0452AEEON-UL13	4x2x12AWG	28,0	1332	5,4
MAC0652AEEON-UL13	6x2x12AWG	33,0	1904	5,4
MAC0852AEEON-UL13	8x2x12AWG	36,8	2470	5,4
MAC1052AEEON-UL13	10x2x12AWG	40,9	2910	5,4
MAC1252AEEON-UL13	12x2x12AWG	42,0	3171	5,4
MAC1652AEEON-UL13	16x2x12AWG	46,5	3901	5,4
MAC2052AEEON-UL13	20x2x12AWG	50,9	4567	5,4
MAC2452AEEON-UL13	24x2x12AWG	56,6	5442	5,4



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

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

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

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

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:

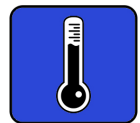
-5° C up to +50° C

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



Assessed to ISO 9001:2015
LPCB Cert. No 568



CERTIFIED MANAGEMENT SYSTEM
BS OHSAS 18001



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 ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TUESK-EGSF	1x2x0,50	6,1	46	37,5
SAM3708TUESX-EGSF	1x3x0,50	6,5	59	37,5
SAM0208TUESK-EGSF	2x2x0,50	8,3	78	37,5
SAM3808TUESX-EGSF	2x3x0,50	10,0	107	37,5
SAM0308TUESK-EGSF	3x2x0,50	8,8	102	37,5
SAM3108TUESX-EGSF	3x3x0,50	10,6	142	37,5
SAM0708TUESK-EGSF	7x2x0,50	11,6	201	37,5
SAM7108TUESX-EGSF	7x3x0,50	14,5	303	37,5
SAM1208TUESK-EGSF	12x2x0,50	15,8	345	37,5
SAM3308TUESX-EGSF	12x3x0,50	19,6	513	37,5
SAM1908TUESK-EGSF	19x2x0,50	18,9	531	37,5
SAM7408TUESX-EGSF	19x3x0,50	23,4	787	37,5
SAM2708TUESK-EGSF	27x2x0,50	23,1	752	37,5
SAM8108TUESX-EGSF	27x3x0,50	28,2	1084	37,5
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 ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TUESK-EISF	1x2x0,50	7,1	65	37,5
SAM3708TUESX-EISF	1x3x0,50	7,4	78	37,5
SAM0208TUESK-EISF	2x2x0,50	12,4	124	37,5
SAM3808TUESX-EISF	2x3x0,50	13,1	150	37,5
SAM0308TUESK-EISF	3x2x0,50	13,2	164	37,5
SAM3108TUESX-EISF	3x3x0,50	14,3	216	37,5
SAM0708TUESK-EISF	7x2x0,50	18,5	364	37,5
SAM7108TUESX-EISF	7x3x0,50	19,6	451	37,5
SAM1208TUESK-EISF	12x2x0,50	25,1	610	37,5
SAM3308TUESX-EISF	12x3x0,50	26,5	760	37,5
SAM1908TUESK-EISF	19x2x0,50	29,6	896	37,5
SAM7408TUESX-EISF	19x3x0,50	31,3	1129	37,5
SAM2708TUESK-EISF	27x2x0,50	35,8	1230	37,5
SAM8108TUESX-EISF	27x3x0,50	37,9	1559	37,5
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 ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TUESK-EGFA	1x2x0,50	9,3	158	37,5
SAM3708TUESX-EGFA	1x3x0,50	9,7	174	37,5
SAM0208TUESK-EGFA	2x2x0,50	11,5	224	37,5
SAM3808TUESX-EGFA	2x3x0,50	13,1	270	37,5
SAM0308TUESK-EGFA	3x2x0,50	12,0	253	37,5
SAM3108TUESX-EGFA	3x3x0,50	13,8	313	37,5
SAM0708TUESK-EGFA	7x2x0,50	14,8	382	37,5
SAM7108TUESX-EGFA	7x3x0,50	18,0	535	37,5
SAM1208TUESK-EGFA	12x2x0,50	19,4	594	37,5
SAM3308TUESX-EGFA	12x3x0,50	23,2	813	37,5
SAM1908TUESK-EGFA	19x2x0,50	22,5	822	37,5
SAM7408TUESX-EGFA	19x3x0,50	27,0	1146	37,5
SAM2708TUESK-EGFA	27x2x0,50	26,7	1107	37,5
SAM8108TUESX-EGFA	27x3x0,50	32,1	1544	37,5
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 ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAI0108TUESK-EIFA	1x2x0,50	10,3	187	37,5
SAI3708TUESX-EIFA	1x3x0,50	10,6	204	37,5
SAI0208TUESK-EIFA	2x2x0,50	16,0	332	37,5
SAI3808TUESX-EIFA	2x3x0,50	16,7	366	37,5
SAI0308TUESK-EIFA	3x2x0,50	16,8	382	37,5
SAI3108TUESX-EIFA	3x3x0,50	17,9	449	37,5
SAI0708TUESK-EIFA	7x2x0,50	22,1	655	37,5
SAI7108TUESX-EIFA	7x3x0,50	23,2	756	37,5
SAI1208TUESK-EIFA	12x2x0,50	29,1	1028	37,5
SAI3308TUESX-EIFA	12x3x0,50	30,5	1198	37,5
SAI1908TUESK-EIFA	19x2x0,50	33,6	1388	37,5
SAI7408TUESX-EIFA	19x3x0,50	35,3	1646	37,5
SAI2708TUESK-EIFA	27x2x0,50	39,8	1816	37,5
SAI8108TUESX-EIFA	27x3x0,50	41,9	2176	37,5
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 ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TUESK-EGPF	1x2x0,50	14,1	581	37,5
SAM3708TUESX-EGPF	1x3x0,50	14,5	611	37,5
SAM0208TUESK-EGPF	2x2x0,50	16,7	747	37,5
SAM3808TUESX-EGPF	2x3x0,50	18,7	886	37,5
SAM0308TUESK-EGPF	3x2x0,50	17,2	799	37,5
SAM3108TUESX-EGPF	3x3x0,50	19,4	957	37,5
SAM0708TUESK-EGPF	7x2x0,50	20,4	1073	37,5
SAM7108TUESX-EGPF	7x3x0,50	23,2	1337	37,5
SAM1208TUESK-EGPF	12x2x0,50	24,8	1534	37,5
SAM3308TUESX-EGPF	12x3x0,50	29,2	2046	37,5
SAM1908TUESK-EGPF	19x2x0,50	28,5	2021	37,5
SAM7408TUESX-EGPF	19x3x0,50	33,6	2712	37,5
SAM2708TUESK-EGPF	27x2x0,50	33,3	2657	37,5
SAM8108TUESX-EGPF	27x3x0,50	38,7	3577	37,5
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 ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
SAM0108TUESK-EIPF	1x2x0,50	15,1	653	37,5
SAM3708TUESX-EIPF	1x3x0,50	15,8	699	37,5
SAM0208TUESK-EIPF	2x2x0,50	21,2	1046	37,5
SAM3808TUESX-EIPF	2x3x0,50	21,9	1110	37,5
SAM0308TUESK-EIPF	3x2x0,50	22,0	1132	37,5
SAM3108TUESX-EIPF	3x3x0,50	23,1	1248	37,5
SAM0708TUESK-EIPF	7x2x0,50	27,7	1812	37,5
SAM7108TUESX-EIPF	7x3x0,50	29,2	1993	37,5
SAM1208TUESK-EIPF	12x2x0,50	35,5	2778	37,5
SAM3308TUESX-EIPF	12x3x0,50	36,9	3031	37,5
SAM1908TUESK-EIPF	19x2x0,50	40,2	3527	37,5
SAM7408TUESX-EIPF	19x3x0,50	42,3	3933	37,5
SAM2708TUESK-EIPF	27x2x0,50	47,2	4691	37,5
SAM8108TUESX-EIPF	27x3x0,50	49,3	5197	37,5
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 588



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 ²)	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 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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



EN 50288-7:2005

RE-2Y(St)Y - 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 ²)	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 mm² - 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

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 ²)	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 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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



EN 50288-7:2005

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



EN 50288-7:2005

RE-2Y(St)YRY

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



CONSTRUCTION

Formation:

Plain annealed copper wire, Stranded acc. to HD 383

Insulation:

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 ²)	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 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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



EN 50288-7:2005

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

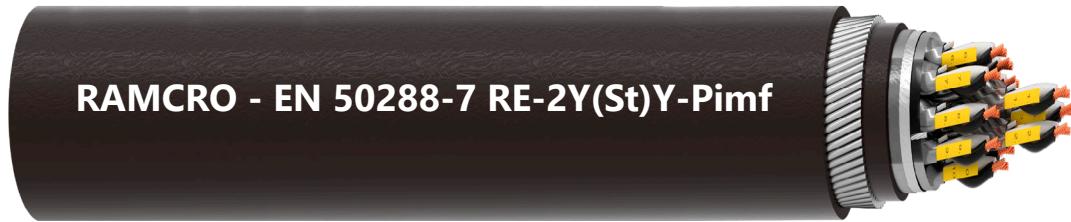


Via Marzorati, 15 - 20014 Nerviano - Milan - Italy / www.ramcro.it

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)

IDENTIFICATION OF CORES

Pair:

○ ● + Yellow Numbered Tapes

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)YRY-Pimf - 90V

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250ADADN-RE9	2x2x0,50	10,9	230	37,5
MAC0450ADADN-RE9	4x2x0,50	12,0	289	37,5
MAC0650ADADN-RE9	6x2x0,50	13,5	361	37,5
MAC0850ADADN-RE9	8x2x0,50	14,5	417	37,5
MAC1050ADADN-RE9	10x2x0,50	16,1	495	37,5
MAC1250ADADN-RE9	12x2x0,50	16,5	537	37,5
MAC1650ADADN-RE9	16x2x0,50	17,9	638	37,5
MAC2050ADADN-RE9	20x2x0,50	19,7	752	37,5
MAC2450ADADN-RE9	24x2x0,50	22,0	974	37,5
MAC0275ADADN-RE9	2x2x0,75	11,7	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 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250ADADN-RE3	2x2x0,50	11,4	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 mm² - 300V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0275ADADN-RE5	2x2x0,75	12,4	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

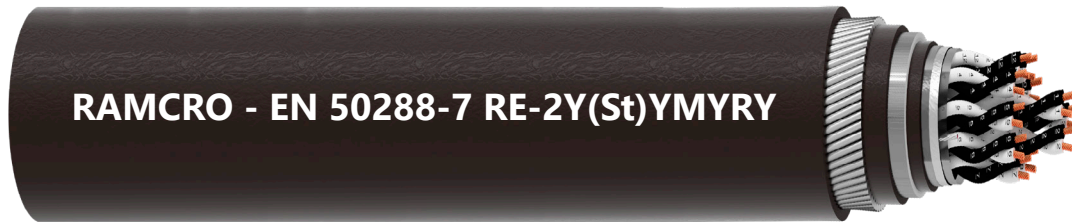
RAMCRO - RE-2Y(St)YRY-Pimf - 1x2x2,5 mm² - 500V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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



EN 50288-7:2005

RE-2Y(St)YMYRY - 300V

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150ADADN-RE3LC	1x2x0,50	14,1	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 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

RE-2Y(St)YMYRY - 500V

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0175HDADN-RE5LC	1x2x0,75	14,7	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

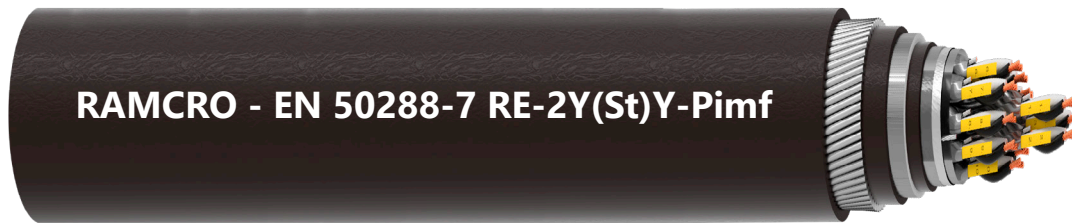
RAMCRO - RE-2Y(St)YMYRY - 1x2x2,5 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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



EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250HDADN-RE3LC	2x2x0,50	16,5	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 mm² - 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 ²)	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 mm² - 500V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

RE-2Y(St)Y4YRY - Nylon Cover

These 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

Insulation Resistance @ 20°C:

> 1000 MOhm*Km

Test Voltage Core-Core:

2000 V

Test Voltage Core-Screen:

2000 V

Mutual Capacitance between conductors:

< 250 nF/km

Inductance:

< 1 mH/km

Operating Voltage:

90/300/500 V



EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150ADADN-RE9NC	1x2x0,50	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 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0150ADADN-RE3NC	1x2x0,50	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 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575: 2014+A1:2016
CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAS0175HDADN-RE5NC	1x2x0,75	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 mm² - 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

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 ²)	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 mm² - 90V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0250HDADN-RE3NC	2x2x0,50	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 mm² - 300V - EN 50288-7 IEC 60332-3 - IEC 60332-1 - EN 50575:2014+A1:2016 CPR Class B2ca + BATCH + METER MARKING



EN 50288-7:2005

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

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
MAC0275HDADN-RE5NC	2x2x0,75	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 mm² - 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.

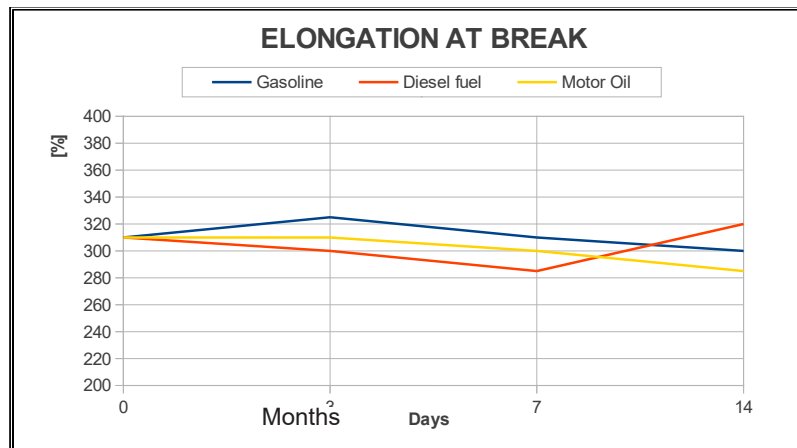
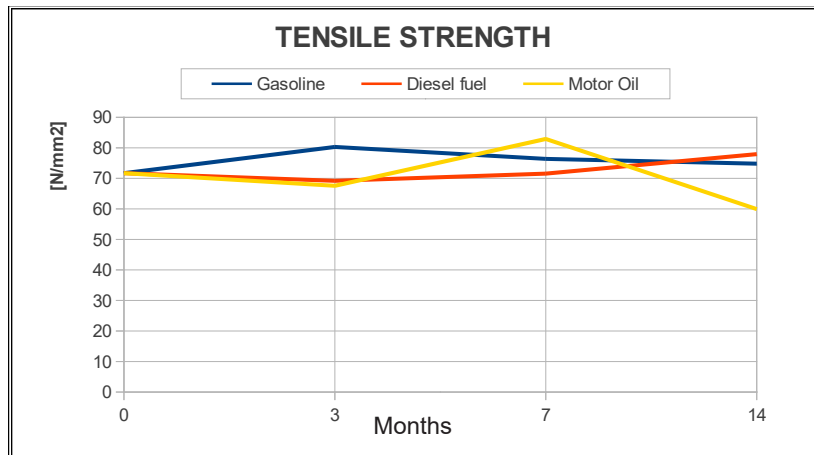
Polyamide has a good chemical resistance against hydrocarbon (comparable to lead), greater mechanical characteristics (specially against lateral compression (crush)) and less weight.

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:

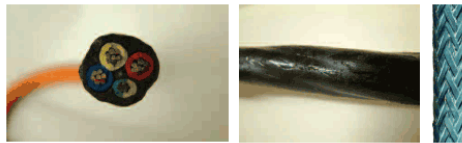
1. The cable entry system - Shall comply with the IEC 60079-1 indications

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.

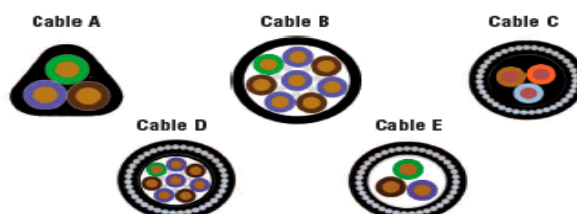
But the cable must play a part in the safety of the installation, even in the case of indirect cable entry, when gas migration must be avoided.

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.

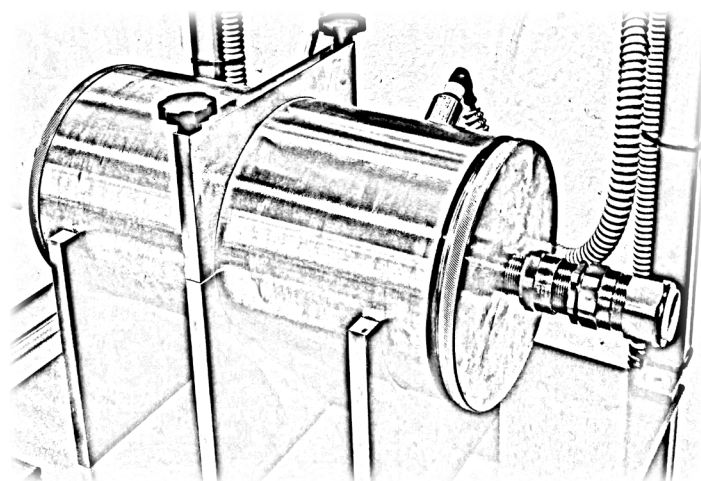
Equally, if the cable is not adequately filled, and allows the passage of air or gas to flow along the cable length then there would be no protection to the inner part of the cable when an elastomeric sealing ring is used.

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 (± 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
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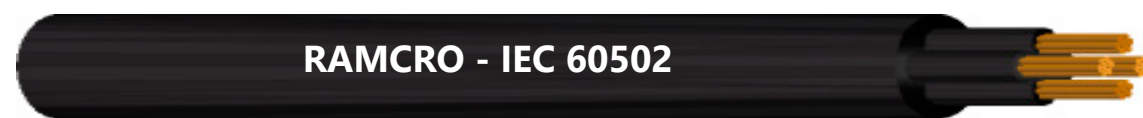


IEC 60502

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

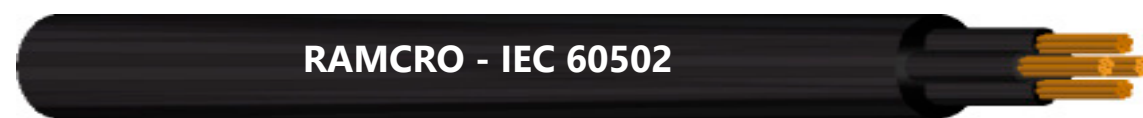
These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

RAMCRO CODE	FORMATION (mm ²)	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.



RAMCRO - IEC 60502

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 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/SWA/PVC

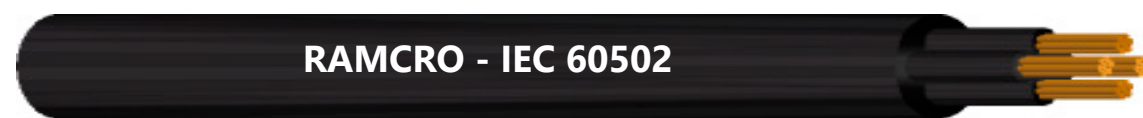
These cables are designed to connect electronic instrumentation, analog and digital signal circuits. This cable does not spread flame to the top of the tray in the Vertical-Tray Flame Test in UL 1685. Suitable for direct burial applications.

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

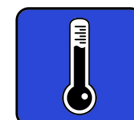
-5° C up to +50° C

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 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/Pb/PVC/SWA/PVC

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

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

RAMCRO CODE	FORMATION (mm ²)	OVERALL DIAMETER (mm)	MAX RESISTANCE CONDUCTOR AT 20°C (Ohm/km)
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 ²)	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 ²)	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 _{CA} s2, d0, a3*
PVC FR/SCREEN/PVC FR	B2 _{CA} s2, d0, a3*
LSZH(FRNC)/LSZH (FRNC)	B2 _{CA} s1, d0, a1*
LSZH (FRNC)/SCREEN/LSZH (FRNC)	B2 _{CA} s1, d0, a1*
XLPE FR/LSZH (FRNC)	B2 _{CA} s1, d0, a1*
XLPE FR/SCREEN/LSZH (FRNC)	B2 _{CA} s1, d0, a1*
XLPE FR/SCREEN/PVC FR/ARMOUR/PVC FR	B2 _{CA} s2, d0, a3*
XLPE FR/SCREEN/LSZH (FRNC)/ARMOUR/LSZH (FRNC)	B2 _{CA} s1, d0, a1*
PE FR/SCREEN/LSZH (FRNC)/ARMOUR/LSZH (FRNC)	B2 _{CA} s1, d0, a1*
PVC FR/SCREEN/PVC FR/ARMOUR/PVC FR	B2 _{CA} s2, d0, a3*
XLPE FR/SCREEN/PVC FR	C _{CA} s2, d1, a3*
PE FR/SCREEN/PVC FR	C _{CA} s2, d1, a3*
PE FR/SCREEN/LSZH (FRNC)	B2 _{CA} s1a, d0, a1*
FG16OHR16	B2 _{CA} s1a, d0, a2*
FG16OHM16	B2 _{CA} s2, d0, a3*

ALARM CABLE

CONSTRUCTION	CPR CLASSIFICATION
PVC FR/PVC FR	C _{CA} s2, d0, a3*
PVC FR/SCREEN/PVC FR	C _{CA} s1, d0, a3*
LSZH (FRNC)/LSZH (FRNC)	C _{CA} s1, d0, a1*
LSZH (FRNC)/SCREEN/LSZH (FRNC)	C _{CA} s1, d0, a1*

DATA LAN

CONSTRUCTION	CPR CLASSIFICATION
U-UTP/U-FTP/S-FTP	E _{CA} *

COAXIAL

CONSTRUCTION	CPR CLASSIFICATION
CLASS A++, A+, B e C	E _{CA} *

SATELLITE

CONSTRUCTION	CPR CLASSIFICATION
SAT CABLE	E _{CA} *

TELEPHONE

CONSTRUCTION	CPR CLASSIFICATION
TRR/TRHR	E _{CA} *

FIRE RESISTANT

CONSTRUCTION	CPR CLASSIFICATION
SIL/CAM/LSZH(FRNC)	C _{CA} s1A, d0, a1*
MICA+XLPE/CAM/LSZH(FRNC)	B2 _{CA} s1A, d0, a1*



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