



brillan
— by Ramrco

BMS Control Cables

Product Catalog 2025

Brillan Cables Industries

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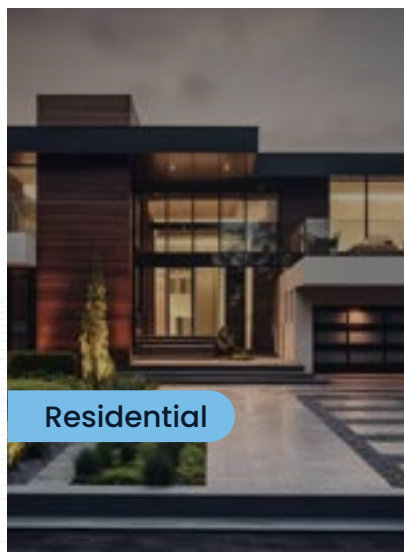
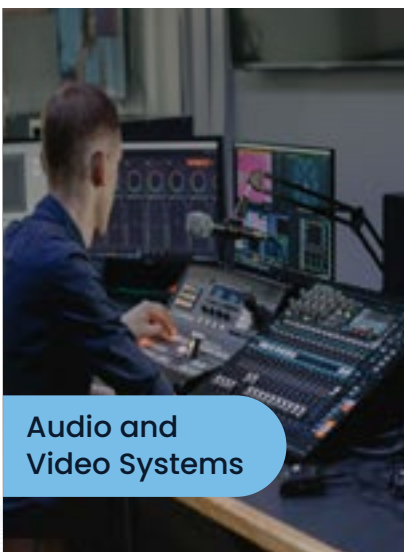
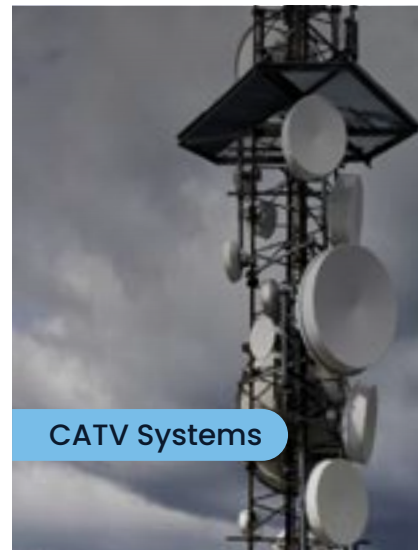
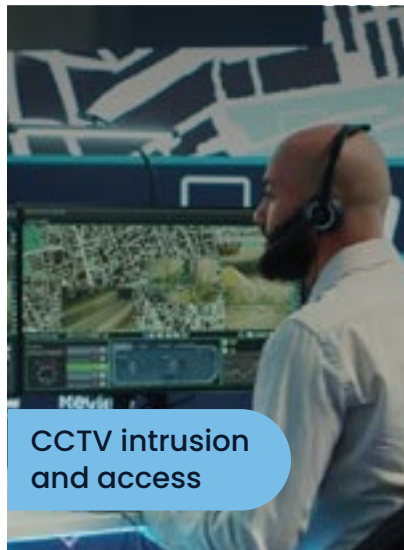
All PVC, LSZH(FRNC) and LSF sheathed multi-conductor cables are suitable for Building Management Systems (BMS), Sound, Audio, Security, Safety, Control and Instrumentation.

www.brillan.com

Introduction

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:



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



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— by Ramrco

**Audio, Control &
Instrumentation**
Multi-Conductor Cable

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



Construction

Formation:

Plain annealed copper wire, Stranded

Insulation:

Polyolefine - PO

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Identification Of Cores

2 Core: ● ●
3 Core: ● ● ○
4 Core: ● ● ○ ●
5 Core: ● ● ○ ● ●
6 Core: ● ● ○ ● ● ●
7 Core: ● ● ○ ● ● ● ●
8 Core: ● ● ○ ● ● ● ● ●

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

Multi-Conductor Cable

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM. OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SSS0207BHA/XX-RB	RI227	2x22AWG	3.1	13	56.7	45.0
SSS0307BHA/XX-RB	RI278	3x22AWG	3.2	17	56.7	45.0
SSS0407BHA/XX-RB	RI279	4x22AWG	3.3	20	56.7	45.0
SSS0607BHA/XX-RB	RI230	6x22AWG	4.0	28	56.7	45.0
SSS0807BHA/XX-RB	RI231	8x22AWG	4.2	33	56.7	45.0
SSS1207BHA/XX-RB	RI232	12x22AWG	4.5	36	56.7	45.0
SSS2006BHA/XX-RB	RI020	2x20AWG	3.5	18	37.2	45.0
SSS4006BHA/XX-RB	RI021	4x20AWG	4.0	30	37.2	45.0
SSS6006BHA/XX-RB	RI024	6x20AWG	4.8	41	37.2	45.0
SSS8006BHA/XX-RB	RI025	8x20AWG	5.3	52	37.2	45.0
SSS1206BHA/XX-RB	RI026	12x20AWG	6.0	64	37.2	45.0
SSS0205BHA/XX-RB	RI014	2x18AWG	3.9	23	22.9	45.0
SSS0305BHA/XX-RB	RI015	3x18AWG	4.1	33	22.9	45.0
SSS0505BHA/XX-RB	RI643	5x18AWG	4.8	61	22.9	45.0
SSS0705BHA/XX-RB	RI644	7x18AWG	5.1	70	22.9	45.0
SSS0905BHA/XX-RB	RI239	9x18AWG	5.8	80	22.9	90.0
SSS0204BHA/XX-RB	RI088	2x16AWG	4.3	30	15.5	50.0
SSS0404BHA/XX-RB	RI089	4x16AWG	5.4	59	15.5	50.0
SSS0604BHA/XX-RB	RI120	6x16AWG	5.8	73	15.5	50.0
SSS0804BHA/XX-RB	RI255	8x16AWG	7.1	111	15.5	50.0
SSS0203BHA/XX-RB	RI033	2x14AWG	5.9	72	9.3	55.0
SSS0403BHA/XX-RB	RI044	4x14AWG	7.8	135	9.3	55.0
SSS0603BHA/XX-RB	RI049	6x14AWG	7.8	135	9.3	55.0
SSS0803BHA/XX-RB	RI121	8x14AWG	8.7	177	9.3	55.0
SSS0202BHA/XX-RB	RI243	2x12AWG	6.1	79	5.7	60.0
SSS0302BHA/XX-RB	RI247	3x12AWG	6.7	91	5.7	60.0
SSS0402BHA/XX-RB	RI248	4x12AWG	7.9	137	5.7	60.0
SSS0502BHA/XX-RB	RI249	5x12AWG	8.0	160	5.7	60.0
SSS0602BHA/XX-RB	RI251	6x12AWG	8.7	180	5.7	60.0
SSS0802BHA/XX-RB	RI333	8x12AWG	9.6	214	5.7	60.0

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:

Polyolefine - PO

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:

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Identification Of Cores

2 Core: ● ●
3 Core: ● ● ○
4 Core: ● ● ○ ●
5 Core: ● ● ○ ● ●
6 Core: ● ● ○ ● ● ●
7 Core: ● ● ○ ● ● ● ●
8 Core: ● ● ○ ● ● ● ● ●

Characteristics

Building Management
Systems Cable

Min. Bending Radius
8 x cable diameter

Put up length 305 mt

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

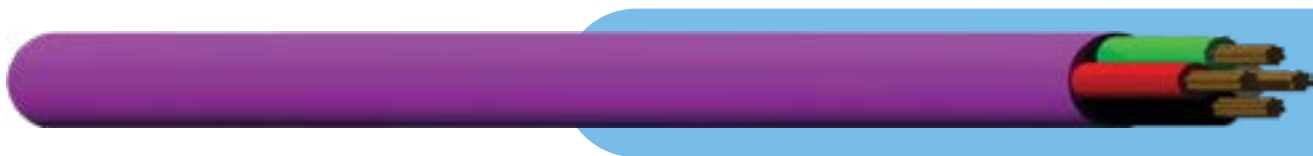
Multi-Conductor Cable

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM. OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SAS0207HBAX/HRB	RI226	2x22AWG	3.2	16	56.7	78.0
SAS0307HBAX/HRB	RI228	3x22AWG	3.4	20	56.7	75.0
SAS0407HBAX/HRB	RI230	4x22AWG	4.0	26	56.7	75.0
SAS0607HBAX/HRB	RI254	6x22AWG	4.3	33	56.7	75.0
SAS0807HBAX/HRB	RI232	8x22AWG	4.7	41	56.7	75.0
SAS0206HBAX/HRB	RI019	2x20AWG	3.6	21	37.2	100.0
SAS0306HBAX/HRB	RI021	3x20AWG	3.8	25	37.2	90.0
SAS0406HBAX/HRB	RI022	4x20AWG	4.1	30	37.2	90.0
SAS0406HBAX/HRB	RI023	4x20AWG	4.1	32	37.2	90.0
SAS0606HBAX/HRB	RI250	6x20AWG	5.0	45	37.2	90.0
SAS0806HBAX/HRB	RI262	8x20AWG	5.4	57	37.2	75.0
SAS0205HBAX/HRB	RI013	2x18AWG	3.8	27	22.9	90.0
SAS0305HBAX/HRB	RI015	3x18AWG	4.2	36	22.9	90.0
SAS0405HBAX/HRB	RI017	4x18AWG	4.6	45	22.9	90.0
SAS0605HBAX/HRB	RI211	6x18AWG	5.5	68	22.9	75.0
SAS0705HBAX/HRB	RI259	7x18AWG	5.8	75	22.9	75.0
SAS0805HBAX/HRB	RI258	8x18AWG	6.0	72	22.9	75.0
SAS0203HBAX/HRB	RI007	2x16AWG	4.7	81	15.5	105.0
SAS0303HBAX/HRB	RI009	3x16AWG	5.0	92	15.5	105.0
SAS0403HBAX/HRB	RI011	4x16AWG	5.4	62	15.5	100.0
SAS0603HBAX/HRB	RI252	6x16AWG	6.7	115	15.5	100.0
SAS0803HBAX/HRB	RI254	8x16AWG	7.2	114	15.5	80.0
SAS0202HBAX/HRB	RI003	2x14AWG	5.6	54	9.3	100.0
SAS0402HBAX/HRB	RI005	4x14AWG	6.5	96	9.3	100.0
SAS0502HBAX/HRB	RI209	5x14AWG	6.9	113	9.3	98.0
SAS0601HBAX/HRB	RI248	6x14AWG	7.9	139	9.3	98.0
SAS0801HBAX/HRB	RI250	8x14AWG	8.3	173	9.3	90.0
SAS0202HBAX/HRB	RI232	2x12AWG	6.8	82	5.7	105.0
SAS0302HBAX/HRB	RI234	3x12AWG	7.2	115	5.7	100.0
SAS0402HBAX/HRB	RI326	4x12AWG	7.8	134	5.7	100.0
SAS0502HBAX/HRB	RI327	5x12AWG	8.3	159	5.7	100.0
SAS0602HBAX/HRB	RI330	6x12AWG	9.7	217	5.7	100.0
SAS0802HBAX/HRB	RI332	8x12AWG	10.8	284	5.7	100.0

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



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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Identification Of Cores

2 Core: ● ●
3 Core: ● ● ○
4 Core: ● ● ○ ●
5 Core: ● ● ○ ● ●
6 Core: ● ● ○ ● ● ●
7 Core: ● ● ○ ● ● ● ●
8 Core: ● ● ○ ● ● ● ● ●

Characteristics

Building Management
Systems Cable

Min. Bending Radius
8 x cable diameter

Put up length 305 mt

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

Multi-Conductor Cable

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM. OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SSGS0207HEXDH-RB	RI742	2x22AWG	3.3	14	50.7	65.0
SSGS0307HEXDH-RB	RI744	3x22AWG	3.5	18	56.7	70.0
SSGS0407HEXDH-RB	RI746	4x22AWG	4.0	23	56.7	70.0
SSGS0607HEXDH-RB	RI748	6x22AWG	4.5	31	56.7	75.0
SSGS0807HEXDH-RB	RI750	8x22AWG	4.9	41	56.7	75.0
SSGS0206HEXDH-RB	RI732	2x20AWG	3.5	17	37.2	65.0
SSGS0306HEXDH-RB	RI734	3x20AWG	3.7	23	37.2	65.0
SSGS0406HEXDH-RB	RI736	4x20AWG	4.0	29	37.2	68.0
SSGS0506HEXDH-RB	RI738	5x20AWG	4.2	35	37.2	68.0
SSGS0606HEXDH-RB	RI740	6x20AWG	4.8	41	37.2	70.0
SSGS0806HEXDH-RB	RI753	8x20AWG	5.5	55	37.2	70.0
SSGS0205HEXDH-RB	RI722	2x18AWG	3.9	19	22.9	65.0
SSGS0305HEXDH-RB	RI724	3x18AWG	4.5	27	22.9	70.0
SSGS0405HEXDH-RB	RI726	4x18AWG	5.0	35	22.9	72.0
SSGS0505HEXDH-RB	RI728	5x18AWG	5.4	42	22.9	75.0
SSGS0605HEXDH-RB	RI730	6x18AWG	6.0	47	22.9	75.0
SSGS0805HEXDH-RB	RI755	8x18AWG	7.1	77	22.9	75.0
SSGS0204HEXDH-RB	RI714	2x16AWG	4.6	33	15.5	65.0
SSGS0304HEXDH-RB	RI716	3x16AWG	5.4	48	15.5	72.0
SSGS0404HEXDH-RB	RI718	4x16AWG	6.1	58	15.5	72.0
SSGS0504HEXDH-RB	RI720	5x16AWG	6.7	71	15.5	75.0

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



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 overtinne 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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Identification Of Cores

2 Core: ● ●
3 Core: ● ● ○
4 Core: ● ● ○ ●
5 Core: ● ● ○ ● ●
6 Core: ● ● ○ ● ● ●
7 Core: ● ● ○ ● ● ● ●
8 Core: ● ● ○ ● ● ● ● ●

Characteristics

Building Management
Systems Cable

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

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

Multi-Conductor Cable

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM. OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SSGS0207HEXDH-RB	RI742	2x22AWG	3.3	14	50.7	65.0
SSGS0307HEXDH-RB	RI744	3x22AWG	3.5	18	56.7	70.0
SSGS0407HEXDH-RB	RI746	4x22AWG	4.0	23	56.7	70.0
SSGS0607HEXDH-RB	RI748	6x22AWG	4.5	31	56.7	75.0
SSGS0807HEXDH-RB	RI750	8x22AWG	4.9	41	56.7	75.0
SSGS0206HEXDH-RB	RI732	2x20AWG	3.5	17	37.2	65.0
SSGS0306HEXDH-RB	RI734	3x20AWG	3.7	23	37.2	65.0
SSGS0406HEXDH-RB	RI736	4x20AWG	4.0	29	37.2	68.0
SSGS0506HEXDH-RB	RI738	5x20AWG	4.2	35	37.2	68.0
SSGS0606HEXDH-RB	RI740	6x20AWG	4.8	41	37.2	70.0
SSGS0806HEXDH-RB	RI753	8x20AWG	5.5	55	37.2	70.0
SSGS0205HEXDH-RB	RI722	2x18AWG	3.9	19	22.9	65.0
SSGS0305HEXDH-RB	RI724	3x18AWG	4.5	27	22.9	70.0
SSGS0405HEXDH-RB	RI726	4x18AWG	5.0	35	22.9	72.0
SSGS0505HEXDH-RB	RI728	5x18AWG	5.4	42	22.9	75.0
SSGS0605HEXDH-RB	RI730	6x18AWG	6.0	47	22.9	75.0
SSGS0805HEXDH-RB	RI755	8x18AWG	7.1	77	22.9	75.0
SSGS0204HEXDH-RB	RI714	2x16AWG	4.6	33	15.5	65.0
SSGS0304HEXDH-RB	RI716	3x16AWG	5.4	48	15.5	72.0
SSGS0404HEXDH-RB	RI718	4x16AWG	6.1	58	15.5	72.0
SSGS0504HEXDH-RB	RI720	5x16AWG	6.7	71	15.5	75.0

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



Construction

Formation:

Plain annealed copper wire, Stranded

Insulation:

Polyolefine - PO

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Identification Of Cores

2 Core: ● ●
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6 Core: ● ● ○ ● ● ●
7 Core: ● ● ○ ● ● ● ●
8 Core: ● ● ○ ● ● ● ● ●

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 lenght 305 mt

Multi-Conductor Cable

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
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SS50307HEXDH-RB	RI744	3x22AWG	3.5	18	56.7	70.0
SS50407HEXDH-RB	RI746	4x22AWG	3.9	23	56.7	70.0
SS50607HEXDH-RB	RI748	6x22AWG	4.5	31	56.7	75.0
SS50807HEXDH-RB	RI750	8x22AWG	4.9	41	56.7	75.0
SS50206HEXDH-RB	RI732	2x20AWG	3.5	17	37.2	65.0
SS50306HEXDH-RB	RI734	3x20AWG	3.7	23	37.2	65.0
SS50406HEXDH-RB	RI736	4x20AWG	4.0	29	37.2	68.0
SS50506HEXDH-RB	RI735	5x20AWG	4.2	35	37.2	68.0
SS50606HEXDH-RB	RI738	6x20AWG	4.8	41	37.2	70.0
SS50806HEXDH-RB	RI740	8x20AWG	5.4	55	37.2	70.0
SS50205HEXDH-RB	RI722	2x18AWG	3.9	24	22.9	65.0
SS50305HEXDH-RB	RI724	3x18AWG	4.5	34	22.9	70.0
SS50405HEXDH-RB	RI726	4x18AWG	4.5	42	22.9	72.0
SS50605HEXDH-RB	RI728	6x18AWG	6.0	77	22.9	75.0
SS50805HEXDH-RB	RI730	8x18AWG	6.0	77	22.9	75.0
SS50204HEXDH-RB	RI712	2x16AWG	4.6	33	15.5	65.0
SS50304HEXDH-RB	RI714	3x16AWG	4.9	45	15.5	70.0
SS50404HEXDH-RB	RI716	4x16AWG	5.4	58	15.5	72.0
SS50604HEXDH-RB	RI718	6x16AWG	6.7	88	15.5	75.0
SS50804HEXDH-RB	RI720	8x16AWG	7.1	110	15.5	75.0
SS50203HEXDH-RB	RI704	2x14AWG	5.9	71	9.3	65.0

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:

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:

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Identification Of Cores

2 Core: ● ●
3 Core: ● ● ○
4 Core: ● ● ○ ●
5 Core: ● ● ○ ● ●
6 Core: ● ● ○ ● ● ●
7 Core: ● ● ○ ● ● ● ●
8 Core: ● ● ○ ● ● ● ● ●

Characteristics

Building Management
Systems Cable

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

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

Multi-Conductor Cable

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SS50207HEXDH-RB	RI742	2x22AWG	3.3	14	50.7	65.0
SS50307HEXDH-RB	RI744	3x22AWG	3.3	18	56.7	70.0
SS50407HEXDH-RB	RI746	4x22AWG	3.5	23	56.7	70.0
SS50607HEXDH-RB	RI748	6x22AWG	4.5	31	56.7	75.0
SS50807HEXDH-RB	RI750	8x22AWG	4.9	41	56.7	75.0
SS50206HEXDH-RB	RI732	2x20AWG	3.5	17	37.2	65.0
SS50306HEXDH-RB	RI734	3x20AWG	3.7	23	37.2	65.0
SS50406HEXDH-RB	RI736	4x20AWG	4.0	29	37.2	68.0
SS50506HEXDH-RB	RI738	5x20AWG	4.2	35	37.2	68.0
SS50606HEXDH-RB	RI740	6x20AWG	4.8	41	37.2	70.0
SS50806HEXDH-RB	RI742	8x20AWG	5.5	55	37.2	70.0
SS50218HEXDH-RB	RI722	2x18AWG	3.9	24	22.9	65.0
SS50318HEXDH-RB	RI724	3x18AWG	4.5	34	22.9	70.0
SS50418HEXDH-RB	RI726	4x18AWG	4.5	42	22.9	72.0
SS50618HEXDH-RB	RI728	6x18AWG	6.0	67	22.9	75.0
SS50818HEXDH-RB	RI730	8x18AWG	6.0	77	22.9	75.0
SS50216HEXDH-RB	RI712	2x16AWG	4.6	33	15.5	65.0
SS50316HEXDH-RB	RI714	3x16AWG	4.9	47	15.5	70.0
SS50416HEXDH-RB	RI716	4x16AWG	5.4	58	15.5	72.0
SS50616HEXDH-RB	RI718	6x16AWG	6.5	88	15.5	75.0
SS50816HEXDH-RB	RI720	8x16AWG	7.1	110	15.5	75.0
SS50214HEXDH-RB	RI704	2x14AWG	5.9	71	9.3	70.0

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:

Polyolefine - PO

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:

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Identification Of Cores

3 Core: ● ● ○

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 length 305 mt

Multi-Conductor Cable

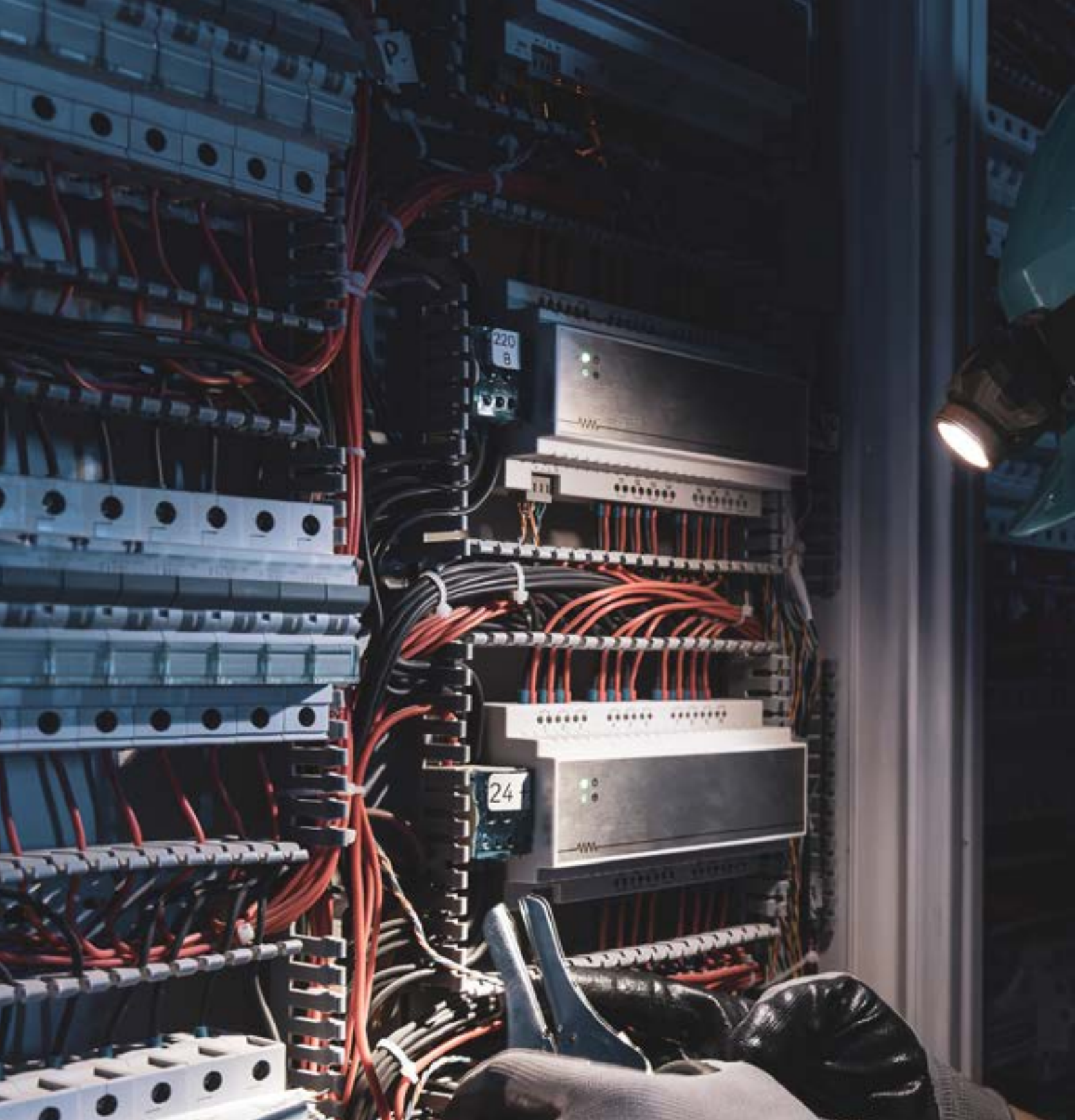
Multi Conductor Cables 22 to 18 AWG Screened PVC or LSZH(FRNC) Sheath 3 Cores

Cable with PO/SCREEN/PVC

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SAS0305HBADX-T-RB	RI225	3x18AWG	6.0	56	23.2	75.0
SAS0306HBADX-T-RB	RI245	3x20AWG	4.9	39	38.5	75.0
SAS0307HBADX-T-RB	RI215	3x22AWG	4.7	32	57.4	75.0

Cable with PO/SCREEN/LSZH(FRNC)

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SAS0305HXEDX-T-RB	RI410	3x18AWG	6.0	36	23.2	80.0
SAS0306HXEDX-T-RB	RI411	3x20AWG	4.9	57	38.5	80.0
SAS0307HXEDX-T-RB	RI412	3x22AWG	4.7	83	57.4	80.0



Brillan Cables Industries

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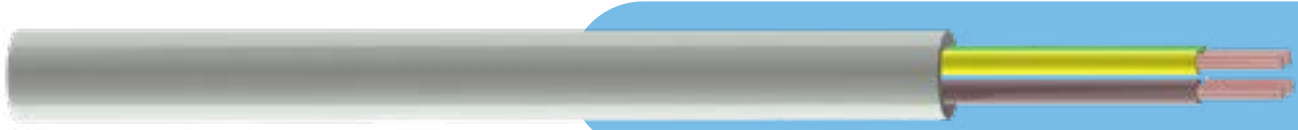


CONTROL CABLE

Multi-Conductor 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 - B2CA s2, d0, a3*

*Available also in EN 50575:2016 - CCA s2, d0, a3

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

Identification Of Cores

- In according to DIN VDE 47100
- OZ: Black Numbered
- JZ: Black Numbered + Green/Yellow

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 mm ² to 0,75 mm ² :	300/500 V
From 1,00 mm ² to 4,00 mm ² :	450/750 V

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Building Management
Systems Cable

Min. Bending Radius
8 x cable diameter

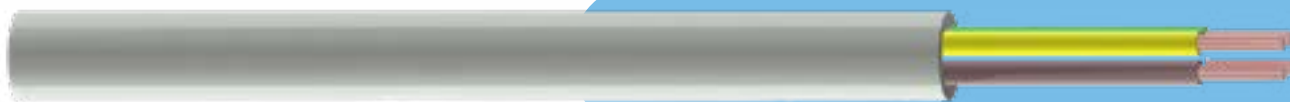
Put up lenght 305 mt

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

RAMCRO CODE	FORMATION (n° x mm²)	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
SSSI014HBSAC	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
SSSI026HBSAC	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
SSSI034HBSAC	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
SSSI050HBSAC	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
SSSI075HBSAC	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
SSSI010HBSAC	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
SSSI015HBSAC	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
SSSI025HBSAC	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
SSSI040HBSAC	10x4.00	16.7	5.1

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

Cpr Classification

EN 50575:2016 - E_{CA}

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

Identification Of Cores

In accordance with HD 308

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

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

Building Management
Systems Cable

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

On Request

Personalized colour code and outer sheath

FROR

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

RAMCRO CODE	FORMATION (n° x mm²)	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
SSSI014HAAAD	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
SSSI026HAAAD	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
SSSI034HAAAD	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
SSSI050HAAAD	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
SSSI075HAAAD	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
SSSI010HAAAD	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
SSSI015HAAAD	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
SSSI025HAAAD	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
SSSI040HAAAD	10x4.00	16.7	5.1

FROR 16

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

Cpr Classification

EN 50575:2016 – CCA, S2, D0, A3

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

Identification Of Cores

In according to HD 308

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Building Management
Systems Cable

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

On Request

Personalized colour code and outer sheath

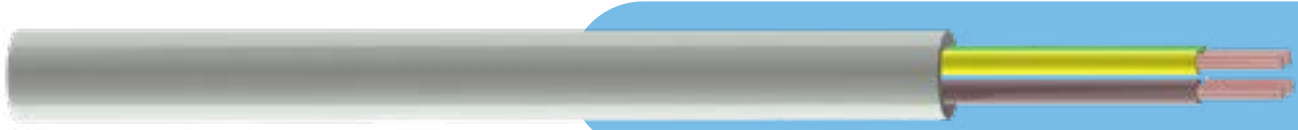
FROR 16

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

RAMCRO CODE	FORMATION (n° x mm²)	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
SSSI014HASAD-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
SSSI026HASAD-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
SSSI034HASAD-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
SSSI050HASAD-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
SSSI075HASAD-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
SSSI010HASAD-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
SSSI015HASAD-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
SSSI025HASAD-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
SSSI040HASAD-CPRC	10x4.00	16.7	5.1

FROR 16

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

Cpr Classification

EN 50575:2016 – B2CA S2, D0, A3

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

Identification Of Cores

In according to HD 308

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Building Management
Systems Cable

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

On Request

Personalized colour code and outer sheath

FROR 16

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

RAMCRO CODE	FORMATION (n° x mm²)	OUTER DIAMETER (mm)	MAX RESISTANCE AT 20°C (Ohm/ km)
SSS0214HASAL	2x0.14	3.3	154.0
SSS0414HASAG	4x0.14	3.6	154.0
SSS0614HASAD	6x0.14	4.5	154.0
SSSI014HASAL	10x0.14	5.3	154.0
SSS0225HASAD	2x0.25	3.8	83.1
SSS0425HASAG	4x0.25	4.1	83.1
SSS0625HASAD	6x0.25	5.4	83.1
SSSI025HASAL	10x0.25	6.4	83.1
SSS0234HASAL	2x0.34	3.9	57.2
SSS0434HASAG	4x0.34	4.3	57.2
SSS0634HASAD	6x0.34	5.7	57.2
SSSI034HASAD	10x0.34	6.6	57.2
SSS0250HASAL	2x0.50	4.5	40.6
SSS0450HASAG	4x0.50	5.0	40.6
SSS0650HASAD	6x0.50	6.0	40.6
SSSI050HASAD	10x0.50	7.8	40.6
SSS0275HASAL	2x0.75	4.0	27.1
SSS0475HASAG	4x0.75	5.6	27.1
SSS0675HASAD	6x0.75	7.5	27.1
SSSI075HASAD	10x0.75	9.0	27.1
SSS0210HASAL	2x1.00	5.5	20.3
SSS0410HASAG	4x1.00	6.3	20.3
SSS0610HASAD	6x1.00	8.6	20.3
SSSI010HASAD	10x1.00	9.8	20.3
SSS0215HASAL	2x1.50	6.5	13.8
SSS0415HASAG	4x1.50	7.2	13.8
SSS0615HASAD	6x1.50	9.8	13.8
SSSI015HASAD	10x1.50	11.6	13.8
SSS0225HASAL	2x2.50	7.7	8.3
SSS0425HASAG	4x2.50	9.0	8.3
SSS0625HASAD	6x2.50	12.5	8.3
SSSI025HASAD	10x2.50	14.4	8.3
SSS0240HASAL	2x4.00	9.4	5.1
SSS0440HASAG	4x4.00	10.8	5.1
SSS0640HASAD	6x4.00	14.5	5.1
SSSI040HASAD	10x4.00	16.7	5.1

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

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

Standard References

- VDE 0812
- EC 60332-1
- IEC 60332-3-24

Cpr Classification

EN 50575:2016 - B2CA S2, D0, A3*

*AVAILABLE ALSO IN EN 50575:2016 - CCA 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

Characteristics

Min. Bending Radius

8 x cable diameter

Control Cable

Italian Market

On Request

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

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

RAMCRO CODE	FORMATION (n° x mm²)	OUTER DIAMETER (mm)	MAX RESISTANCE AT 20°C (Ohm/ km)
STS0214HBAAC	2x0.14	3.7	154.0
STS0414HBAAC	4x0.14	4.0	154.0
STS0614HBAAC	6x0.14	4.5	154.0
STS1014HBAAC	10x0.14	5.7	154.0
STS0225HBAAC	2x0.25	4.2	83.1
STS0425HBAAC	4x0.25	4.5	83.1
STS0625HBAAC	6x0.25	5.4	83.1
STS1025HBAAC	10x0.25	6.8	83.1
STS0234HBAAC	2x0.34	4.3	57.2
STS0434HBAAC	4x0.34	4.7	57.2
STS0634HBAAC	6x0.34	5.6	57.2
STS1034HBAAC	10x0.34	7.0	57.2
STS0250HBAAC	2x0.50	4.9	40.6
STS0450HBAAC	4x0.50	5.6	40.6
STS0650HBAAC	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
STS0675HBAAC	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
STS0610HBAAC	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
STS0615HBAAC	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
STS0625HBAAC	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
STS0640HBAAC	6x4.00	13.7	5.1
STS1040HBAAC	10x4.00	17.1	5.1

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

Cable Printing

RAMCRO - FR2OH2R 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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius

8 x cable diameter

Control Cable

Italian Market

On Request

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

FROHR2

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

RAMCRO CODE	FORMATION (n° x mm²)	OUTER DIAMETER (mm)	MAX RESISTANCE AT 20°C (Ohm/ km)
FR60214HAAAL	2x0.14	3.7	154.0
FR60414HAAG	4x0.14	4.0	154.0
FR60614HAAAD	6x0.14	4.5	154.0
FR61014HAAAD	10x0.14	5.7	154.0
FR60225HAAAL	2x0.25	4.2	83.1
FR60425HAAG	4x0.25	4.5	83.1
FR60625HAAAD	6x0.25	5.4	83.1
FR61025HAAAD	10x0.25	6.8	83.1
FR60234HAAAL	2x0.34	4.3	57.2
FR60434HAAG	4x0.34	4.7	57.2
FR60634HAAAD	6x0.34	5.6	57.2
FR61034HAAAD	10x0.34	7.0	57.2
FR60250HAAAL	2x0.50	4.9	40.6
FR60450HAAG	4x0.50	5.6	40.6
FR60650HAAAD	6x0.50	6.7	40.6
FR61050HAAAD	10x0.50	8.6	40.6
FR60275HAAAL	2x0.75	5.5	27.1
FR60475HAAG	4x0.75	6.0	27.1
FR60675HAAAD	6x0.75	7.3	27.1
FR61075HAAAD	10x0.75	9.4	27.1
FR60210HAAAL	2x1.00	5.9	20.3
FR60410HAAG	4x1.00	6.7	20.3
FR60610HAAAD	6x1.00	7.9	20.3
FR61010HAAAD	10x1.00	10.6	20.3
FR60215HAAAL	2x1.50	6.9	13.8
FR60415HAAG	4x1.50	7.6	13.8
FR60615HAAAD	6x1.50	9.3	13.8
FR61015HAAAD	10x1.50	12.0	13.8
FR60225HAAAL	2x2.50	6.9	8.3
FR60425HAAG	4x2.50	9.4	8.3
FR60625HAAAD	6x2.50	11.5	8.3
FR61025HAAAD	10x2.50	14.8	8.3
FR60240HAAAL	2x4.00	9.8	5.1
FR60440HAAG	4x4.00	11.2	5.1
FR60640HAAAD	6x4.00	13.7	5.1
FR61040HAAAD	10x4.00	17.1	5.1

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} Sl, D0, A3

Identification Of Cores

In according to HD 308

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius

8 x cable diameter

Control Cable

Italian Market

On Request

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

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
FR60614HASAD-CPRC	6x0.14	4.5	154.0
FR61014HASAD-CPRC	10x0.14	5.7	154.0
FR60225HASAL-CPRC	2x0.25	4.2	83.1
FR60425HASAG-CPRC	4x0.25	4.5	83.1
FR60625HASAD-CPRC	6x0.25	5.4	83.1
FR61025HASAD-CPRC	10x0.25	6.8	83.1
FR60234HASAL-CPRC	2x0.34	4.3	57.2
FR60434HASAG-CPRC	4x0.34	4.7	57.2
FR60634HASAD-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
FR60650HASAD-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
FR60675HASAD-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
FR60610HASAD-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
FR60615HASAD-CPRC	6x1.50	9.3	13.8
FR61015HASAL-CPRC	10x1.50	12.0	13.8
FR60225HASAL-CPRC	2x2.50	6.9	8.3
FR60425HASAG-CPRC	4x2.50	9.4	8.3
FR60625HASAD-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
FR60640HASAD-CPRC	6x4.00	13.7	5.1
FR61040HASAD-CPRC	10x4.00	17.1	5.1

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} SL, D0, A3

Identification Of Cores

In according to HD 308

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius

8 x cable diameter

Control Cable

Italian Market

On Request

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

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
FR60814HASAG	6x0.14	4.5	154.0
FR61014HASAG	10x0.14	5.7	154.0
FR60224HASAL	2x0.25	4.2	83.1
FR60426HASAG	4x0.25	4.5	83.1
FR60626HASAG	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
FR60634HASAD	6x0.34	5.6	57.2
FR61034HASAL	10x0.34	7.0	57.2
FR60250HASAL	2x0.50	4.9	40.6
FR60450HASAG	4x0.50	5.6	40.6
FR60650HASAD	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
FR60675HASAD	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
FR60610HASAD	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
FR60615HASAD	6x1.50	9.3	13.8
FR61015HASAL	10x1.50	12.0	13.8
FR60225HASAL	2x2.50	8.9	8.3
FR60425HASAG	4x2.50	9.4	8.3
FR60625HASAD	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
FR60640HASAD	6x4.00	13.7	5.1
FR61040HASAD	10x4.00	17.1	5.1

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:

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 - C_{CA} S1, D0, A3

Identification Of Cores

In according to HD 308

Cable Printing

RAMCRO - FR2OHH2R 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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius

8 x cable diameter

Control Cable

Italian Market

On Request

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

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)
SMS0250HAAA	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

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

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 4.00 mm²: 450/750 V

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius

8 x cable diameter

Control Cable

Italian Market

On Request

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

FROH2R16

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
SMS0275HASAL-CPRC	2x0.75	5.6	27.1
SMS0375HASAG-CPRC	3x0.75	5.9	27.1
SMS0475HASAF-CPRC	4x0.75	6.6	27.1
SMS0575HASAT-CPRC	5x0.75	7.1	27.1
SMS0675HASAD-CPRC	6x0.75	7.6	27.1
SMS0210HASAL-CPRC	2x1.00	6.0	20.3
SMS0310HASAG-CPRC	3x1.00	6.5	20.3
SMS0410HASAF-CPRC	4x1.00	7.0	20.3
SMS0510HASAT-CPRC	5x1.00	7.6	20.3
SMS0610HASAD-CPRC	6x1.00	8.6	20.3
SMS0215HASAL-CPRC	2x1.50	7.0	13.8
SMS0315HASAG-CPRC	3x1.50	7.3	13.8
SMS0415HASAF-CPRC	4x1.50	8.0	13.8
SMS0515HASAT-CPRC	5x1.50	9.0	13.8
SMS0615HASAD-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

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

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 4.00 mm²: 450/750 V

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius

8 x cable diameter

Control Cable

Italian Market

On Request

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

FROH2R16

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
SMS0275HASAL	2x0.75	5.6	27.1
SMS0375HASAG	3x0.75	5.9	27.1
SMS0475HASAF	4x0.75	6.6	27.1
SMS0550HASAT	5x0.75	7.1	27.1
SMS0650HASAD	6x0.75	7.6	27.1
SMS0210HASAL	2x1.00	6.0	20.3
SMS0310HASAG	3x1.00	6.5	20.3
SMS0410HASAF	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

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), OSIbased 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.

RS-422

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.

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.



brillan
— by Ramrco

DATA LAN CABLE
Multi-Conductor Cable

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:

Polyolefine base - PO

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 Cores

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

4AWG 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 No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MAR0108HBADX-T-RB	RI189	1x2x24AWG	5.7	38	15.46	41.0
MAR0208HBADX-T-RB	RI190	2x2x24AWG	8.4	60	15.46	41.0
MAR0308HBADX-T-RB	RI191	3x2x24AWG	8.9	73	15.46	41.0
MAR0408HBADX-T-RB	RI192	4x2x24AWG	9.7	87	15.46	41.0

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MAR0108HXEDX-T-RB	RI318	1x2x24AWG	5.6	36	15.46	41.0
MAR0208HXEDX-T-RB	RI319	2x2x24AWG	8.2	57	15.46	42.0
MAR0308HXEDX-T-RB	RI320	3x2x24AWG	8.7	69	15.46	42.0
MAR0408HXEDX-T-RB	RI321	4x2x24AWG	9.5	83	15.46	42.0

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MAR0107HBADX-T-RB	RI080	1x2x22AWG	6.4	48	73.1	36.0
MAR0207HBADX-T-RB	RI295	2x2x22AWG	9.8	76	73.1	37.0
MAR0307HBADX-T-RB	RI296	3x2x22AWG	10.4	93	73.1	38.0
MAR0407HBADX-T-RB	RI297	4x2x22AWG	11.4	113	73.1	38.0

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MAR0107HXEDX-T-RB	RI401	1x2x22AWG	6.0	40	73.1	36.0
MAR0207HXEDX-T-RB	RI402	2x2x22AWG	9.1	66	73.1	37.0
MAR0307HXEDX-T-RB	RI403	3x2x22AWG	10.1	83	73.1	38.0
MAR0407HXEDX-T-RB	RI404	4x2x22AWG	11.0	100	73.1	38.0

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MAR0105HXEDX-T-RB	RI405	1x2x18AWG	8.9	75	90.0	32.0
MAR0205HXEDX-T-RB	RI406	2x2x18AWG	11.5	111	90.0	35.0
MAR0305HXEDX-T-RB	RI407	3x2x18AWG	13.5	138	90.0	38.0
MAR0405HXEDX-T-RB	RI408	4x2x18AWG	14.8	194	90.0	38.0

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 Cores

1 pair: ● ●

2 pair: ● ○

3 pair: ● ●

4 pair: ● ●

5 pair: ● ●

6 pair: ● ●

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius
8 x cable diameter

Put up length 305 mt

RS-422 APPLICATIONS

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

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM. OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MAP0208HBADX-T-RB	RI382	2x2x24AWG	7.2	42	88.0	41.0
MAP0308HBADX-T-RB	RI383	3x2x24AWG	8.3	61	88.0	41.0
MAP0408HBADX-T-RB	RI384	4x2x24AWG	9.2	76	88.0	41.0
MAP0608HBADX-T-RB	RI386	6x2x24AWG	10.5	105	88.0	41.0

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).



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

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

- 1 pair: ● ●
- 2 pair: ● ○
- 3 pair: ● ●
- 4 pair: ● ●
- 5 pair: ● ●
- 6 pair: ● ●
- 7 pair: ● ●
- 8 pair: ● ○

Cable Printing

RAMCRO ITALY - R_____ - DATA LAN CABLE - RS 232 -
IPR 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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

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 No.	FORMATION (P 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
MAS0208HBAAH-T-RB	R1182	2x2x24AWG	5.2	34	88.0	76
MAS0308HBAAH-T-RB	R1183	3x2x24AWG	5.5	41	88.0	76
MAS0408HBAAH-T-RB	R1184	4x2x24AWG	5.7	43	88.0	80
MAS0508HBAAH-T-RB	R1185	5x2x24AWG	6.5	52	88.0	80
MAS0608HBAAH-T-RB	R1186	6x2x24AWG	6.9	53	88.0	80
MAS0708HBAAH-T-RB	R1187	7x2x24AWG	6.9	59	88.0	80
MAS0808HBAAH-T-RB	R1188	8x2x24AWG	7.7	66	88.0	80

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

RAMCRO CODE	PART No.	FORMATION (P 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
MAS0208HXEEH-T-RB	R1641	2x2x24AWG	5.2	27	88.0	76
MAS0308HXEEH-T-RB	R1642	3x2x24AWG	5.5	33	88.0	76
MAS0408HXEEH-T-RB	R1643	4x2x24AWG	5.7	37	88.0	80
MAS0508HXEEH-T-RB	R1644	5x2x24AWG	6.5	45	88.0	80
MAS0608HXEEH-T-RB	R1645	6x2x24AWG	6.9	48	88.0	80
MAS0708HXEEH-T-RB	R1646	7x2x24AWG	6.9	54	88.0	80
MAS0808HXEEH-T-RB	R1647	8x2x24AWG	7.7	61	88.0	80

MODBUS APPLICATIONS

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



Construction

Formation:

Tinned copper wire, Stranded

Insulation:

Polyolefine base - PO

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

Braiding:

Tinned copper wire braid

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 Cores

- 1 pair: ● ●
- 2 pair: ● ○
- 3 pair: ● ●
- 4 pair: ● ●
- 5 pair: ● ●
- 6 pair: ● ●
- 7 pair: ● ●
- 8 pair: ● ○

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 MAR- KING

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

MODBUS APPLICATIONS

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

Cable with 22AWG CONDUCTORS – PO/PVC

RAMCRO CODE	PART No.	FORMATION (P 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
MAP0307HBADX-T-RB	R1197	3x2x22AWG	6.3	50	57.4	100
MAP0607HBADX-T-RB	R1214	6x2x22AWG	8.0	83	57.4	100

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

RAMCRO CODE	PART No.	FORMATION (P 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
MAS0208HXEEH-T-RB	R1282	3x2x24AWG	6.8	63	57.4	155
MAS0508HXEEH-T-RB	R1314	6x2x24AWG	9.3	110	57.4	155

M-BUS APPLICATIONS

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 suitable for other types of consumption meters.



Construction

Formation:

Tinned copper wire, Stranded

Insulation:

Thermoplastic Low Smoke, Halogen Free - LSZH(FRNC)

Polyolefine base - PO

Wrapping:

at least 1 layer of plastic tape 0,023 mm

Outer Sheath:

Polyvinyl chloride - PVC

Thermoplastic low smoke, Halogen free - LSZH(FRNC)

Polyolefine base - PO

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 Cores

1 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 - 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 length 305 mt

M-BUS APPLICATIONS

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

Cable with PO/UNSCREENED/PVC

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MSE0107HBAON-T-RB	RI301	1x2x22AWG	3.9	19	57.40	70
MSE0106HBAON-T-RB	RI300	1x2x20AWG	4.2	24	35.75	70
MSE0105HBAON-T-RB	RI203	1x2x18AWG	4.8	32	22.70	70
MSE0103HBAON-T-RB	RI198	1x2x16AWG	6.6	58	15.47	50
MSE0101HBAON-T-RB	RI222	1x2x14AWG	8.4	91	9.3	108
MSE0152HBAON-T-RB	RI302	1x2x12AWG	9.5	110	5.9	115

Cable with LSZH/UNSCREENED/LSZH

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MSE0107HXEEN-T-RB	RI311	1x2x22AWG	3.3	14	57.40	85
MSE0106HXEEN-T-RB	RI309	1x2x20AWG	3.5	17	35.75	80
MSE0105HXEEN-T-RB	RI271	1x2x18AWG	3.9	24	22.70	80
MSE0103HXEEN-T-RB	RI307	1x2x16AWG	4.6	33	15.47	75
MSE0101HXEEN-T-RB	RI306	1x2x14AWG	5.5	51	9.3	75
MSE0152HXEEN-T-RB	RI304	1x2x12AWG	6.7	78	5.9	75

Cable with PO/UNSCREENED/LDPE

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MSE0107HEDDN-T-RB	RI879	1x2x22AWG	4.2	14	57.40	70
MSE0106HEDDN-T-RB	RI878	1x2x20AWG	5.0	19	35.75	70
MSE0105HEDDN-T-RB	RI874	1x2x18AWG	5.5	25	22.70	70
MSE0103HEDDN-T-RB	RI872	1x2x16AWG	7.3	45	15.47	50
MSE0101HEDDN-T-RB	RI876	1x2x14AWG	8.4	66	9.3	108
MSE0152HEDDN-T-RB	RI880	1x2x12AWG	9.5	94	5.9	115

LONWORKS APPLICATIONS

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



Construction

Formation:

Tinned copper wire, Solid

Insulation:

Polyolefine base – 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

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 Cores

1 pair: ●●

2 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 -
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

LONWORKS APPLICATIONS

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

Cable with 24AWG CONDUCTORS – PO/UNSCREENED/LSZH(FRNC)

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SSR0107HXEDX-RB	RI346	1x2x22AWG	3.2	13	57.4	46.0
SSR0107HXEDX-RB	RI347	2x2x22AWG	5.0	24	57.4	46.0

Cable with 24AWG CONDUCTORS – PO/SCREENED/LSZH(FRNC)

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SAM0107HXEDX-RB	RI348	1x2x22AWG	4.9	33	57.4	46.0
SAM0207HXEDX-RB	RI349	2x2x22AWG	8.0	72	57.4	46.0

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:

Polyolefine base – 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:

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 Cores

1 pair: ●

2 pair: ●

3 pair: ○

4 pair: ●

Cable Printing

RAMCRO ITALY – R_____ – EIB CABLE 4x0.8mm
SCREENED LSZH (FRNC) – – RAMCRO CODE – “PROD.
WEEK/YEAR” – MADE IN ITALY + BATCH + METER
MARKING

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

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

KNX OR GENERAL BUS APPLICATIONS

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

Cable with 24AWG CONDUCTORS – PO/SCREEN/PVC – CERTIFIED KNX REG. N. 566/16623/20

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SAM0109HADH-RB	R1219	1x2x24AWG	5.1	38	37.0	100.0
SAM4109HADH-RB	R1217	1x4x24AWG	5.7	53	37.0	100.0

Cable with 24AWG CONDUCTORS – PO/SCREEN/LSZH(FRNC) – CERTIFIED KNX REG. N. 566/16624/20

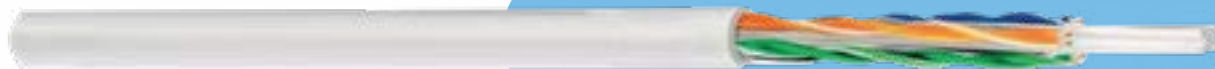
RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SAM0108HIEDH-RB	R1220	1x2x24AWG	5.1	36	37.0	100.0
SAM4108HIEDH-RB	R1218	1x4x24AWG	5.7	51	37.0	100.0

Cable with 24AWG CONDUCTORS – PO/SCREEN/PE

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SAM0108HIDDH-RB	R1901	1x2x24AWG	5.1	48	37.0	100.0
SAM4108HIDDH-RB	R1900	1x4x24AWG	5.7	33	37.0	100.0

CAT3

CAT3



Construction

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyolefine base - PO

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 Cores

1 pair: 

2 pair: 

3 pair: 

4 pair: 

Cable Printing

RAMCRO ITALY - R_____ - DATA LAN CABLE 4 PAIRS
UTP CAT 3 RAMCRO CODE - "PROD.WEEK/YEAR" - MADE
IN ITALY + BATCH + METER MARKING

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

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

CAT3

CAT3

Cable with 24AWG CONDUCTORS - PO/SCREEN/PVC

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM. OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
CAT3-2P-RB	RI031	2x2x24AWG	3.6	16	96.0	66
CAT3-6P-RB	RI266	6x2x24AWG	5.5	39	96.0	66
CAT3-12P-RB	RI267	12x2x24AWG	7.4	73	96.0	66
CAT3-25P-RB	RI032	25x2x24AWG	11.8	154	96.0	66
CAT3-50P-RB	RI033	50x2x24AWG	15.5	280	96.0	66
CAT3-100P-RB	RI034	100x2x24AWG	21.6	530	96.0	66
CAT3-150P-RB	RI268	150x2x24AWG	26.8	800	96.0	66
CAT3-200P-RB	RI269	200x2x24AWG	29.4	1040	96.0	66

Cable with 24AWG CONDUCTORS - PO/SCREEN/PVC

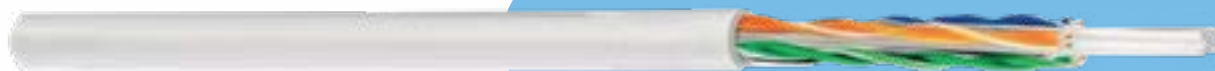
FREQUENCY [MHz]	MAX. ATTENUATION [dB/100m]	MAX. NEXT [dB]	MIN. RETURN LOSS [dB]	IMPEDANCE [Ohm]
1	2.6	41.3	12.0	100 ± 15
4	5.6	32.3	12.0	100 ± 15
8	8.5	27.8	12.0	100 ± 15
10	9.7	26.3	12.0	100 ± 15
16	13.1	23.3	12.0	100 ± 15

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		

FTP UTP 5E

FTP UTP 5E



Construction

Formation:

Plain annealed copper wire, Solid

Insulation:

Polyolefine base - 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:

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 Cores

1 pair: 

2 pair: 

3 pair: 

4 pair: 

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

FTP / UTP 5e

FTP / UTP 5e

Cable with 24AWG CONDUCTORS - PO/SCREEN/PVC

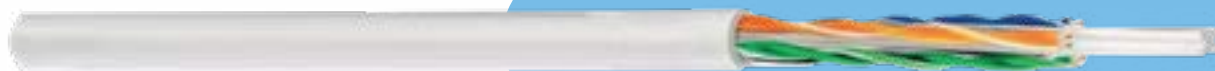
RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
UTPLEVEL5-4X2X0.22-RB	RI035	U-UTP	PVC	5.0	30	93.8
UTPLEVEL5-4X2X0.22ZA-RB	RI235	U-UTP	PVC	5.0	29	93.8
FTPLEVEL5-4X2X0.22-RB	RI036	U-FTP	LSZH(FRNC)	6.3	42	93.8
FTPLEVEL54X2X0.22ZA-RB	RI236	U-FTP	LSZH(FRNC)	6.3	43	93.8

Cable with 24AWG CONDUCTORS - PO/SCREEN/PVC

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

FTP UTP 6

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



Construction

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyolefine base – 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:

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 Cores

1 pair: 

2 pair: 

3 pair: 

4 pair: 

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

FTP UTP 6

FTP / UTP 6

Cable with 24AWG CONDUCTORS - PO/SCREEN/PVC

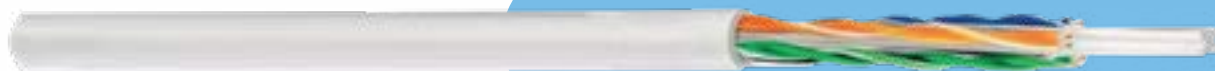
RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
UTPLEVEL6-4X2X0.22-RB	RI037	U-UTP	PVC	6.2	42	93.8
UTPLEVEL6-4X2X0.22ZA-RB	RI237	U-UTP	LSZH(FRNC)	6.2	42	93.8
FTPLEVEL64X2X0.22-RB-RB	RI038	U-FTP	PVC	7.4	56	93.8
FTPLEVEL64X2X0.	RI238	U-FTP	LSZH(FRNC)	7.4	54	93.8

Cable with 24AWG CONDUCTORS - PO/SCREEN/PVC

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

FTP UTP 6A

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



Construction

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyolefine base – 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:

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 Cores

1 pair: 

2 pair: 

3 pair: 

4 pair: 

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

FTP UTP 6A

FTP / UTP 6A

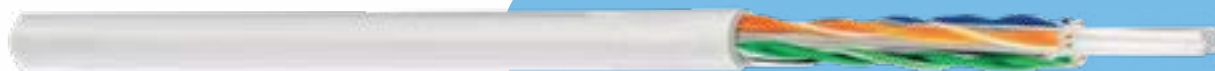
RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
UTPLEVEL6A4X2X0.22-RB	RI055	U-UTP	PVR	7.0	160	93.8
UTPLEVEL6A4X2X0.22A-RB	RI200	U-UTP	LSZH(FRNR)	7.0	155	93.8
FTPLEVEL6A4X2X0.22-RB	RI056	F-UTP	PVR	7.2	200	76.9
FTPLEVEL6A4X2X0.22A-RB	RI052	F-UTP	LSZH(FRNR)	7.2	196	76.9
UFTPLEVEL6A4X2X0.22-RB	RI057	U-FTP	PVR	7.8	210	76.9
UFTPLEVEL6A4X2X0.22A-RB	RI053	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

CAT 7

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



Construction

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyolefine base – 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:

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 Cores

1 pair: 

2 pair: 

3 pair: 

4 pair: 

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

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

CAT 7

Cat 7

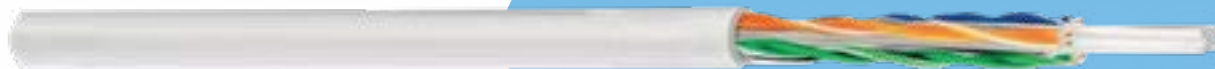
RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SFTPLEVEL7-RB	RI009	S-FTP	LSZH(FRNC)	7.8	68	57.9

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	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

CAT 7A

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



Construction

Formation:

Plain annealed copper wire, 7 Strand

Insulation:

Polyolefine base – 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:

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 Cores

1 pair: 

2 pair: 

3 pair: 

4 pair: 

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

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Characteristics

Min. Bending Radius
8 x cable diameter

Put up lenght 305 mt

CAT 7A

Cat 7

RAMCRO CODE	PART No.	FORMATION (P x AWG)	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SFTP LEVEL7A-RB	RI201	S-FTP	LSZH(FRNR)	7.8	68	57.9

TECHNICAL PERFORMANCE

FREQUENCY [MHz]	IMPEDANCE [OHM]	MIN. RETURN LOSS [dB/100m]	MAX. ATTENUATION [dB/100m]	MAX. TIME DELAY [ns/100m]	MIN. NEXT [dB]	MIN. PSNEXT [dB]
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

EV CABLES – CONNECTION FOR CHARGING STATIONS

Application

The EV RAMCRO Cable is suitable for EV charging unit power and flow monitoring. The cable is a combination of power cores and screened Cat6A data cable offering a solution for quick installation including connection to CTs, eliminating the need to run two separate cables. Suitable for installation in air, clipped to surface, on tray/ladder, embedded in concrete, and for direct burial when mechanical protection is in place.

Characteristics

Voltage	0.6/1kV
Test Voltage	5000V
Temperature Rating Fixed:	-30°C to +80°C
Minimum Bending Radius	6 x outer diameter

Construction

Conductor

Power Cores: Class 5 flexible stranded Copper
Cat6A Pairs: Class 1 solid Copper

Insulation

Power Cores: XLPE (Cross-Linked Polyethylene)
Cat6A Pairs: HDPE (High Density Polyethylene)

Individual & Collective Screen (Cat6A F/FTP Pairs only)

Al/PET (Aluminium/Polyester Tape) with tinned copper drain wire

Cat6A Sheath

LSZH (Low Smoke Zero Halogen)

Tape and Interstitial Fillers

Outer Sheath

LSZH (Low Smoke Zero Halogen) – UV Resistant

Sheath Color

Black

Cable Warranty

This cable has a warranty period of 25 years

Standards

IEC 60502-1, IEC/EN 60228, TIA/EIA 568-B.10, IEC 61158-5

UV Resistant to EN 50396

Abrasion Resistant to EN 50289-3-7

Low Smoke Zero Halogen according to IEC/EN 61034-1/2, IEC/EN 60754-1/2

Flame retardant according to IEC/EN 60332-1-2, IEC/EN 60332-3-24

Regulatory Compliance

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU.

Core Identification

Power – 3 Cores: 
Power – 4 Cores: 
Power – 5 Cores: 

Cat6A Pairs:

Pair 1:  
Pair 2:  
Pair 3:  
Pair 4:  

EV CABLES – CONNECTION FOR CHARGING STATIONS

Dimension

RAMCRO CODE	NUMBER OF CORES	NOMINAL CROSS SECTIONAL AREA POWER CORES mm ²	NOMINAL AWG SIZE CAT6A DATA AWG	NOMINAL DIAMETER CAT6A mm	NOMINAL THICKNESS INSULATION (POWER) mm	NOMINAL OVERALL DIAMETER mm	NOMINAL PULLING TENSION N	NOMINAL WEIGHT kg/km
VCS0325HEEXM-CL5-FFTP6A	3	2.50	23	6.9	0.7	13.3	434	355
VCS0425HEEXF-CL5-FFTP6A	4	2.50	23	6.9	0.7	13.9	545	402
VCS0525HEEXX-CL5-FFTP6A	5	2.50	23	6.9	0.7	14.7	657	450
VCS0340HEEXM-CL5-FFTP6A	3	4.00	23	6.9	0.8	14.5	609	435
VCS0440HEEXF-CL5-FFTP6A	4	4.00	23	6.9	0.8	15.4	779	508
VCS0540HEEXZ-CL5-FFTP6A	5	4.00	23	6.9	0.8	16.5	948	584
VCS0360HEEXM-CL5-FFTP6A	3	6.00	23	6.9	0.9	16.1	899	560
VCS0460HEEXF-CL5-FFTP6A	4	6.00	23	6.9	0.9	17.5	1166	662
VCS0560HEEXZ-CL5-FFTP6A	5	6.00	23	6.9	0.9	19.1	1343	770

NOMINAL CROSS SECTIONAL AREA POWER CORES mm ²	POWER CONDUCTOR DC RESISTANCE AT 20 °C Ω/km	NCAT6A DATA CONDUCTOR DC RESISTANCE AT 20 °C Ω/km	INSULATION RESISTANCE AT 20 °C MΩ/km	MUTUAL CAPACITANCE max nF/km	INDUCTANCE max mH/km	L/R RATIO max uH/Ω	CURRENT CARRYING CAPACITY AT 30°C Amps
2.50	8.3	93.8	1000	140	1	60	26
4.00	5.1	93.8	1000	130	1	60	35
6.00	3.4	93.8	1000	115	1	60	44



LAN Cat. 6 4x2x23AWG + 3x2.50 mm²

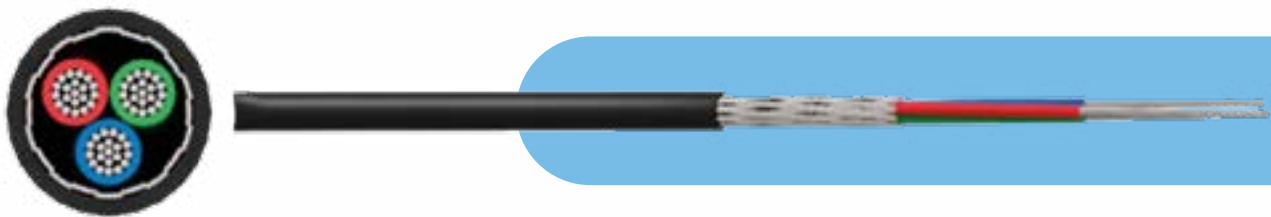


LAN Cat. 6 4x2x23AWG + 5x6.0 mm²

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances

DEFENCE STANDARD 61-12 PART 4 CABLE

These Multi-Core flexible cables are designed for high density wiring between components within instruments and electronic equipment. They are extensively used in aircraft, process control systems, computers, data processors, military vehicles and military equipment.



Construction

Voltage Rating

Cores with 7/0.2 mm conductors:
440V r.m.s. at frequencies up to 1.6 kHz

Maximum Resistance of Conductor at 20°C
7/0.2 mm: 92 ohms/km

Temperature Rating

Fixed: -30°C to + 70°C
Flexed: -15°C to +70°C

Minimum Bending Radius
Fixed: 7.5 x overall diameter

Construction

Conductor

Stranded tinned copper conductor; 0.22mm² (7/0.2mm)

Insulation

PVC (Polyvinyl Chloride)

Screen

TCWB (Tinned Copper Wire Braid)

Sheath

PVC (Polyvinyl Chloride)

Sheath Colour
Black

Circular Conductor, PVC Insulated, PVC Sheathed, Def Stan 61/12 Part 4

NO. OF CORES	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	0.45	3.35	13
3	0.45	3.35	16
4	0.45	3.85	20
6	0.45	4.55	30
12	0.55	6.1	53
18	0.65	7.4	80
25	0.65	8.7	100
36	0.65	9.8	140
50	0.75	11.6	200

Circular Conductor, PVC Insulated, PVC Sheathed, Def Stan 61/12 Part 4

NO. OF CORES	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	0.45	3.85	23
3	0.45	3.95	27
4	0.45	4.35	32
6	0.55	5.6	55
8	0.55	5.6	60
12	0.55	6.9	83
18	0.65	8.2	110
25	0.65	9.5	150
36	0.75	10.8	200
50	0.75	12.6	270

DEFENCE STANDARD 61-12 PART 4 CABLE

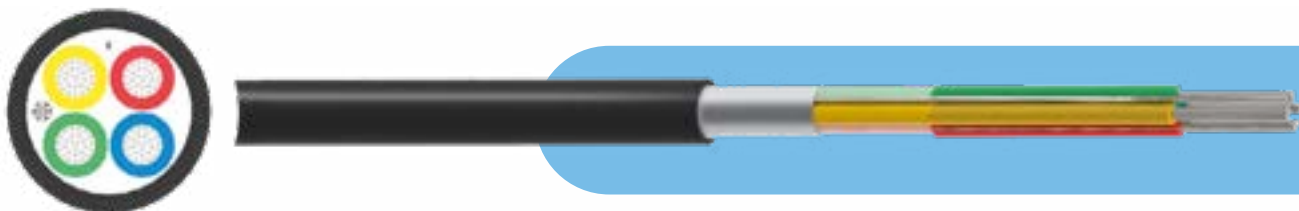
These Multi-Core flexible cables are designed for high density wiring between components within instruments and electronic equipment. They are extensively used in aircraft, process control systems, computers, data processors, military vehicles and military equipment.

Circular Conductor, PVC Insulated, Individually Screened Cores, PVC Sheathed, Def Stan 61/12 Part 4

NO. OF CORES	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	0.45	4.25	22
3	0.45	4.55	29
4	0.55	5.1	40
6	0.55	6.1	58
12	0.65	8.2	110
18	0.65	9.6	150
25	0.75	11.65	210
36	0.75	13.1	290
50	0.9	15.6	410

DEFENCE STANDARD 61-12 PART 4 LSZH CABLE

These multi-core flexible cables are designed for high density wiring between components within instruments and electronic equipment. They are extensively used in aircraft, process control systems, computers, data processors, military vehicles and military equipment. The LSZH construction ensures enhanced performance in the event of fire reducing the emissions of smoke and toxic fumes making them a perfect solution for sensitive equipment areas. For installations where fire, smoke emissions and toxic fumes create a potential threat to life and equipment.



Construction

Voltage Rating

440V r.m.s. at frequencies up to 1.6kHz

Maximum Resistance of Conductor at 20°C

7/0.2: 92ohms/km

Temperature Rating

Fixed: -30°C to +60°C

Flexed: -15°C to +60°C

Minimum Bending Radius

Fixed: 7.5 x overall diameter

NO. OF CORES	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	3.7	23
3	4	27
4	4.3	32
6	5.1	60
12	6.6	83
18	7.8	110
25	9.2	150

NO. OF CORES	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	3.9	23
3	4.1	27
4	4.4	32
6	5.6	53
8	5.9	61
12	6.9	62
18	8.2	144
25	9.5	148

Standart

Defence Standard 61-12 Part 4, UL 1581, BS EN

IEC 60574-1 BS EN IEC 60574-2, BS EN/IEC

61034-2

Construction

Conductor

Class 2 Stranded tinned copper conductor

Insulation

LSZH (Low Smoke Zero Halogen)

Tape

Mylar

Drain Wire

Stranded tinned copper

Screen

Al-foil (Aluminium foil)

Tape

Mylar

Rip Cord

Nylon

Sheath

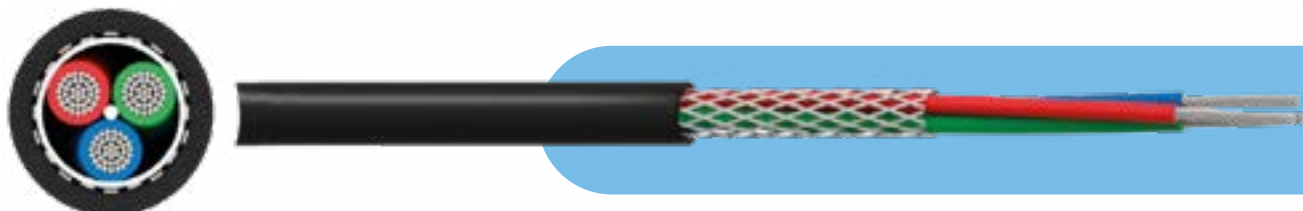
LSZH (Low Smoke Zero Halogen)

Sheath Colour

Black

DEFENCE STANDARD 61-12 PART 5 CABLE

These Multi-Core flexible cables are designed for high density wiring between components and within instruments and electronic equipment. They are extensively used in aircraft, process control systems, computers, data processors, military vehicles and military equipment.



Construction

Voltage Rating

440V r.m.s. at frequencies up to 1.6kHz

Maximum Resistance of Conductor at 20°C

16/0.2 : 40.1 ohms/km

Current Carrying Capacity

2.5 Amps

Temperature Rating

Fixed: -30°C to +70°C

Flexed: -15°C to +70°C

Minimum Bending Radius

Fixed: 7.5 x overall diameter

Construction

Conductor

Class 5 flexible tinned copper conductor

Insulation

PVC (Polyvinyl Chloride)

Screen

TCWB (Tinned Copper Wire Braid)

Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

Black

Circular Conductor, PVC Insulated, PVC Sheathed, Def Stan 61/12 Part 4

NO. OF CORES	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	0.9	5.5	34
3	0.9	5.8	42
4	0.9	6.3	54
6	0.9	7.3	75
8	0.9	8.5	96
12	0.9	9.5	120
18	0.9	11	180
25	0.9	13.1	230

Circular Conductor, PVC Insulated, Collectively Screened Cores, PVC Sheathed, Def Stan 61/12 Part 5

NO. OF CORES	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	0.9	6.5	69
3	0.9	6.8	79
4	0.9	7.3	92
6	0.9	8.3	120
8	0.9	8.9	140
10	0.9	9.3	165
12	0.9	10.6	190
18	0.9	12	250
25	0.9	14	320

DEFENCE STANDARD 61-12 PART 5 CABLE

Circular Conductor, PVC Insulated, Individually Screened Cores, PVC Sheathed, Def Stan 61/12 Part 5

NO. OF CORES	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	0.9	6	47
3	0.9	6.8	60
4	0.9	7.4	75
6	0.9	8.7	110
7	0.9	8.7	120
12	0.9	11.3	190
18	0.9	13.3	270
25	0.9	15.9	360

DEFENCE STANDARD 61-12 PART 5 LSZH CABLE

These multicore flexible cables are designed for high density wiring between components within instruments and electronic equipment. They are extensively used in aircraft, process control systems, computers, data processors, military vehicles and military equipment. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.



Construction

Voltage Rating

440V r.m.s. at frequencies up to 1.6kHz

Maximum Resistance of Conductor at 20°C

16/0.2: 40.1ohms/km

Current Carrying Capacity

2.5 Amps

Temperature Rating

Fixed: -30°C to +60°C

Flexed: -15°C to +60°C

Minimum Bending Radius

Fixed: 7.5 x overall diameter

LSZH Insulated, Foil Screen, LSZH Sheath

NO. OF CORES	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	4.8	45
4	6.2	60
6	7.2	81
8	8.2	104
12	9.7	132
18	12.6	198
25	9.2	150

LSZH Insulated, TCWB (Tinned Copper Wire Braid), LSZH Sheath

NO. OF CORES	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	6.5	66
3	6.8	76
4	7.3	90
6	8.3	114
8	8.9	135
5 Pair	11.3	179
12	10.5	183
18	12.5	256
25	14.1	321

Standart

Defence Standard 61-12 Part 5, UL 1581,

BS EN IEC 60574-1/2, BS EN/IEC 61034-2

Construction

Conductor

Class 5 Stranded tinned copper conductor

Sizes

16 strands/0.2 mm

Insulation

LSZH (Low Smoke Zero Halogen)

Tape

Mylar

Drain Wire

Stranded tinned copper

Screen

Al-foil (Aluminium foil)

Tape

Mylar

Rip Cord

Nylon

Sheath

LSZH (Low Smoke Zero Halogen)

Sheath Colour

Black

LSZH Insulated, TCWB (Tinned Copper Wire Braid), LSZH Sheath

NO. OF CORES	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	5.5	35
3	5.8	45
4	6.5	73
6	7.3	128
8	9.5	178
10	11	247
12	13.4	345
18	15.1	463
25	17.6	543



Brillan Cables Industries

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3100, Dallas, TX 75201

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brillan
— by Ramrco

INDUSTRIAL &
AUTOMOTIVE



PROFIBUS DPType

Profibus DP cables are suitable for communication between masters and slaves in a Profibus system, cyclical exchange data with all of the slaves assigned to a master, one at a time, according to its list of assigned slaves taken from the master record. Suitable for fast and cyclical exchange data with Master and its Slaves, where the class 1 master uses the bandwidth by realizing asynchronous data exchanges with the Slaves using both confirmed (read inputs, read outputs) and/or not confirmed services (freeze, sync).



Construction

Formation:

Bare copper solid or flexible

Insulation:

Foam polyolefin – FPE

1st overall shield:

overlapped shielding tape aluminium/polyester tape

– Coverage ≥ 100 %

2nd overall shield:

braid shield tinned copper – Coverage ≥ 65 %

Outer Sheath:

Polyvinyl Chloride – PVC

Thermoplastic low smoke, Halogen free – LSZH(FRNC)

Colour Outer Sheath:

Violet – PVC

Violet – LSZH(FRNC)

Standard References

- DIN EN 61784-1
- DIN EN 61158
- NETBUS L2/F.I.P.(Factor,Instrumentation,Protocol)
- PROFIBUS® DP (DIN 19245)
- RS 485
- IEC 60332-1-2 for PVC sheath
- IEC 60754-1&2 for LSZH(FRNC) sheath
- IEC 61034 for LSZH(FRNC) sheath

Characteristics

Building Management
Systems Cable

Min. Bending Radius
10 x cable diameter

Put up length 305 m

Identification Of Cores

2 core: ● ●

Electrical Data

Nominal Impedance: 150±10% ohm
Capacitance: ≤ 30 pF/m
Transmission speed: Up to 12Mbit/s
Insulation Resistance @ 20°C: > 25 MOhm*Km
Test Voltage Core-Core: 2000 V
Test Voltage Core-Screen: 2000 V
Operating Voltage: 300 V

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Cable with 24AWG CONDUCTORS – PO/UNSCREENED/LSZH(FRNC)

RAMCRO CODE	Copper Class	FORMATION [n° x AWG]	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MRT012ZXA4X-DP	Solid	1x2x22AWG	8	65	55.4	30.0
SDS0107JHXA4X-DP	Flexible	1x2x22AWG	8	65	55.4	30.0

Cable with FPE/DoubleSCREEN/LSZH(FRNC)

RAMCRO CODE	Copper Class	FORMATION [n° x AWG]	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MRT012ZHXE4X-DP	Solid	1x2x22AWG	8	65	55.4	30.0
SDS0107JHXE4X-DP	Flexible	1x2x22AWG	8	65	55.4	30.0

ETHER CAT.Type

This range of cables accommodates any application, including drag-chain applications involving up to 20 million alternating bending cycles. Not only that, but EtherCAT and fieldbus cables also enable secure data transmission that is optimized for industrial applications and harsh environmental conditions. Fully tested, the cables feature a high-quality 360° shield connection for optimum electromagnetic compatibility.



Construction

Formation:

Bare copper solid
Tinned copper flexible

Insulation:

Polyolefin - PE

1st overall shield:

Overlapped shielding tape aluminium tape
- Coverage 2nd overall shield:
Braid shield tinned copper - Coverage ≥ 85%

Outer Sheath:

Polyvinyl Chloride - PVC

Colour Outer Sheath:

Green

Standard References

- DIN VDE 0295, IEC 60228 or CEI 20-29
- 1581, 758(UL); C22.2 n° 210(CSA)
- IEC 61156-3(EU);
- CEI EN 50288-2-1(EU); EIA/TIA 568-B.2
- ISO/IEC 11801-1 (CL. D)

Characteristics

Building Management
Systems Cable

Min. Bending Radius
10 x cable diameter

Put up length 305 m

Identification Of Cores

4 cores: ○ ● ● ●

Electrical Data

Nominal Impedance: 100±15% ohm
Capacitance: ≤ 60 pF/m
Transmission speed: Up to 100Mbit/s
Insulation Resistance @ 20°C: > 25 MOhm*Km
Test Voltage Core-Core: 3000 V
Test Voltage Core-Screen: 3000 V
Operating Voltage: 1000 V

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Cable with PE/DoubleSCREEN/PVC

RAMCRO CODE	Copper Class	FORMATION [n° x AWG]	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
SDS4107JHIAOX-T-ETG	Tinned / Flexible	1x4x22AWG	6,5	63	55,4	< 60,0
MRT4122JHIAOX-F-ETG	Bare / Solid	1x4x22AWG	6,5	63	55,4	< 60,0

CANOPENType

Controller Area Network Cables are suitable for a complete support for automotive and industrial applications. These cables help the combination straightforward intuitive CAN API with support for an extensible range of external and on-chip CAN controllers.



Construction

Formation:

Bare copper solid or flexible

Insulation:

Foam polyolefin – FPE

Outer Sheath:

Polyvinyl Chloride – PVC

Colour Outer Sheath:

Violet

Standard References

- DIN VDE 0295, IEC 60228 or CEI 20-29
- 1581, 758(UL); C22.2 n° 210(CSA); ISO 11898; RS 485

Characteristics

Building Management
Systems Cable

Min. Bending Radius
10 x cable diameter

Put up length 305 m

Identification Of Cores

DIN 47100

Electrical Data

Nominal Impedance: 100±15% ohm
Capacitance: ≤ 50 pF/m
Transmission speed: Up to 1Mbit/s
Insulation Resistance @ 20°C: > 25 MOhm*Km
Test Voltage Core-Core: 500 V / 2000 V
Operating Voltage: 30 V / 300 V

Temperature Range

During Operation:

-30° C up to +80°C

During Installation:

-5° C up to +50°C

Cable with PE/PVC – 30 V

RAMCRO CODE	Copper Class	FORMATION [n° x AWG]	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MSS0106HXADC-COP	Solid	1x2x20AWG	6,7	65	43,6	<50
STS0334HXADC-COP	Flexible	1x2x0,34+1x0,34	6,9	70	55,4	<50
MSS4134HXADC-COP	Flexible	1x4x0,34	6,8	66	55,4	<50
MSS0234HXADC-COP	Flexible	2x2x0,34	7	71	55,4	<50

Cable with FPE/PVC – 300 V

RAMCRO CODE	Copper Class	FORMATION [n° x AWG]	NOM.OUTER DIAMETER (mm)	NOM. WEIGHT (kg/km)	MAX RESISTANCE AT 20°C (Ohm/ km)	NOM. CAPACITANCE (pF/m)
MSE0122HXA4C-COP	Solid	1x2x0,22	5,5	44	90	<50

NOTES

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

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