

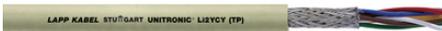
UNITRONIC® Li2YCY (TP)

Screened data transmission cable mit PE core insulation, 7-wire strands and twisted pairs

UNITRONIC® Li2YCY (TP): Low-frequency low-capacitance screened PVC data cable with DIN 47100 coded Twisted PE single core pairs, RS422/ RS485 interface wiring

Info

Cables for RS485/RS422



Interference signals

Benefits

Overall braid minimises electrical interference

Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

Particularly suitable for wiring data systems with transmission rates up to 10 Megabits per second, and is qualified for the RS422 and RS485 interfaces.

For fixed and limited flexible installation

Can be used in dry or damp rooms

Signal-, control- and measuring cable, for transmission of low, sensitive signals and high bit rates

UNITRONIC®

Li2YCYv (TP) with its reinforced, nominal/ minimum average wall thickness of at least 1.8 mm of the black outer sheath (Yv) is designed for indoor and outdoor use as well as for applications where a reinforced outer sheath may turn out to be advantageous

Product features

Flame-retardant according IEC 60332-1-2

Norm references / Approvals

Last Update (09.10.2019)

©2019 Lapp Group - Technical changes reserved

Product Management www.lappkabel.de

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02_03.16

UNITRONIC® Li2YCY (TP)

Based on VDE 0812

Product Make-up

7-wire bare stranded copper conductor
Core insulation made of polyethylene (PE)
TP structure
Tinned-copper braiding
Outer sheath made of PVC
Outer sheath colour: pebble grey (RAL 7032)

Technical Data

| | |
|------------------------------------|---|
| Classification ETIM 5: | ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable |
| Classification ETIM 6: | ETIM 6.0 Class-ID: EC000104 ETIM 6.0 Class-Description: Control cable |
| Core identification code: | DIN 47100, refer to Appendix T9 |
| Mutual capacitance: | At 800 Hz: max. 60 nF/km |
| Inductivity: | approx. 0.65 mH/km |
| Conductor stranding: | Stranded conductor, based on VDE 0881, 7-wire |
| Minimum bending radius: | Occasional flexing: 15 x outer diameter Fixed installation: 6 x outer diameter |
| Short-range crosstalk attenuation: | Up to 1 MHz min. 50 dB Up to 10 MHz min. 40 dB |
| Test voltage: | Core/core: 2000 V Core/screen: 1000 V |
| Characteristic impedance: | 100 ± 15 Ohm (> 1 MHz) |
| Temperature range: | Occasional flexing: -5°C to +70°C Fixed installation: -40°C to +80°C |

Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

TERMI-POINT® is a registered trademark of AMP

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

UNITRONIC® Li2YCY (TP)

| Article number | Number of pairs and mm ² per conductor | Outer diameter [mm] | Copper index (kg/km) | Weight (kg/km) |
|------------------------|---|---------------------|----------------------|----------------|
| UNITRONIC® Li2YCY (TP) | | | | |
| 0031320 | 2 x 2 x 0.22 | 6.5 | 24.2 | 59 |
| 0031321 | 3 x 2 x 0.22 | 7.1 | 28.6 | 66 |
| 0031322 | 4 x 2 x 0.22 | 7.3 | 34.2 | 78 |
| 0031323 | 8 x 2 x 0.22 | 9.1 | 70 | 125 |
| 0031324 | 10 x 2 x 0.22 | 10.4 | 76 | 143 |
| 0031335 | 1 x 2 x 0.34 | 5.8 | 20 | 44 |
| 0031325 | 2 x 2 x 0.34 | 7.7 | 34.1 | 79 |
| 0031326 | 3 x 2 x 0.34 | 8.4 | 43 | 89 |
| 0031327 | 4 x 2 x 0.34 | 8.7 | 47 | 101 |
| 0031328 | 8 x 2 x 0.34 | 11 | 85.8 | 176 |
| 0031336 | 1 x 2 x 0.5 | 6.3 | 29 | 53 |
| 0031330 | 2 x 2 x 0.5 | 8.5 | 37 | 85 |
| 0031331 | 3 x 2 x 0.5 | 9.3 | 55 | 105 |
| 0031332 | 4 x 2 x 0.5 | 9.6 | 60 | 122 |
| 0031333 | 8 x 2 x 0.5 | 12.7 | 113.3 | 213 |
| 0031334 | 10 x 2 x 0.5 | 14.8 | 154 | 261 |

Last Update (09.10.2019)

©2019 Lapp Group - Technical changes reserved

Product Management www.lappkabel.deYou can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03_16

UNITRONIC® Li2YCY (TP) fine-wire

Screened data transmission cable mit PE core insulation, fine wire strands and twisted pairs

UNITRONIC® Li2YCY (TP) fine-wire: LF, Low-capacitance, flexible, screened PVC data cable, DIN 47100, Twisted PE single core pairs, RS422/ RS485 interface wiring

Info

Cables for RS485/RS422



Interference signals

Benefits

Overall braid minimises electrical interference

Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

Particularly suitable for wiring data systems with transmission rates up to 10 Megabits per second, and is qualified for the RS422 and RS485 interfaces.

For fixed and limited flexible installation

Can be used in dry or damp rooms

Signal-, control- and measuring cable, for transmission of low, sensitive signals and high bit rates

UNITRONIC®

Li2YCYv (TP) with its reinforced, nominal/ minimum average wall thickness of at least 1.8 mm of the black outer sheath (Yv) is designed for indoor and outdoor use as well as for applications where a reinforced outer sheath may turn out to be advantageous

Product features

Flame-retardant according IEC 60332-1-2

Norm references / Approvals

Last Update (09.10.2019)

©2019 Lapp Group - Technical changes reserved

Product Management www.lappkabel.de

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02_03.16

UNITRONIC® Li2YCY (TP) fine-wire

Based on VDE 0812

Product Make-up

Conductors: Finely stranded bare copper
Core insulation made of polyethylene (PE)
TP structure
Tinned-copper braiding
Outer sheath made of PVC
Outer sheath colour: pebble grey (RAL 7032)

Technical Data

| | |
|------------------------------------|---|
| Classification ETIM 5: | ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable |
| Classification ETIM 6: | ETIM 6.0 Class-ID: EC000104 ETIM 6.0 Class-Description: Control cable |
| Core identification code: | DIN 47100, refer to Appendix T9 |
| Mutual capacitance: | At 800 Hz: max. 60 nF/km |
| Inductivity: | approx. 0.65 mH/km |
| Conductor stranding: | Stranded conductor, fine-wire |
| Minimum bending radius: | Occasional flexing: 15 x outer diameter Fixed installation: 6 x outer diameter |
| Short-range crosstalk attenuation: | Up to 1 MHz min. 50 dB Up to 10 MHz min. 40 dB |
| Test voltage: | Core/core: 2000 V Core/screen: 1000 V |
| Characteristic impedance: | 100 ± 15 Ohm (> 1 MHz) |
| Temperature range: | Occasional flexing: -5°C to +70°C Fixed installation: -40°C to +80°C |

Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

UNITRONIC® Li2YCY (TP) fine-wire

| Article number | Number of pairs and mm ² per conductor | Outer diameter [mm] | Copper index (kg/km) | Weight (kg/km) |
|----------------------------------|---|---------------------|----------------------|----------------|
| UNITRONIC® Li2YCY (TP) fine-wire | | | | |
| 0031370 | 1 x 2 x 0.25 | 5.7 | 14 | 38 |
| 0031371 | 2 x 2 x 0.25 | 6.9 | 28 | 43 |
| 0031372 | 3 x 2 x 0.25 | 7.5 | 39.6 | 64 |
| 0031373 | 5 x 2 x 0.25 | 8.3 | 50 | 93 |

Last Update (09.10.2019)

©2019 Lapp Group - Technical changes reserved

Product Management www.lappkabel.deYou can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03.16

UNITRONIC® Li2YCYv (TP)

Screened data transmission cable mit PE core insulation, reinforced outer sheath and twisted pairs

UNITRONIC® Li2YCYv (TP): Low-capacitance screened PVC data cable, DIN 47100 coded Twisted PE pairs, Reinforced black jacket/ Outdoor laying, RS422/ RS485 wiring

Info

Cables for RS485/RS422



Interference signals

Benefits

Overall braid minimises electrical interference

Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Application range

Particularly suitable for wiring data systems with transmission rates up to 10 Megabits per second, and is qualified for the RS422 and RS485 interfaces.

For fixed and limited flexible installation

Can be used in dry or damp rooms

Signal-, control- and measuring cable, for transmission of low, sensitive signals and high bit rates

UNITRONIC®

Li2YCYv (TP) with its reinforced, nominal/ minimum average wall thickness of at least 1.8 mm of the black outer sheath (Yv) is designed for indoor and outdoor use as well as for applications where a reinforced outer sheath may turn out to be advantageous

Product features

Flame-retardant according IEC 60332-1-2

Norm references / Approvals

Last Update (08.10.2019)

©2019 Lapp Group - Technical changes reserved

Product Management www.lappkabel.de

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02_03.16

UNITRONIC® Li2YCYv (TP)

Based on VDE 0812

Product Make-up

7-wire bare stranded copper conductor
Core insulation made of polyethylene (PE)
TP structure
Tinned-copper braiding
Wall thickness of the outer sheath is increased ("Yv")
Outer sheath colour: black (RAL 9005)

Technical Data

| | |
|------------------------------------|---|
| Classification ETIM 5: | ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable |
| Classification ETIM 6: | ETIM 6.0 Class-ID: EC000104 ETIM 6.0 Class-Description: Control cable |
| Core identification code: | DIN 47100, refer to Appendix T9 |
| Mutual capacitance: | At 800 Hz: max. 60 nF/km |
| Inductivity: | approx. 0.65 mH/km |
| Conductor stranding: | Stranded conductor, based on VDE 0881, 7-wire |
| Minimum bending radius: | Occasional flexing: 15 x outer diameter Fixed installation: 6 x outer diameter |
| Short-range crosstalk attenuation: | Up to 1 MHz min. 50 dB Up to 10 MHz min. 40 dB |
| Test voltage: | Core/core: 2000 V Core/screen: 1000 V |
| Characteristic impedance: | 100 ± 15 Ohm (> 1 MHz) |
| Temperature range: | Occasional flexing: -5°C to +70°C Fixed installation: -40°C to +80°C |

Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

UNITRONIC® Li2YCYv (TP)

| Article number | Number of pairs and mm ² per conductor | Outer diameter [mm] | Copper index (kg/km) | Weight (kg/km) |
|--|---|---------------------|----------------------|----------------|
| UNITRONIC® Li2YCYv (TP) black for outdoor installation and direct burial, 7-wire | | | | |
| 0031350 | 2 x 2 x 0.22 | 8.1 | 24.2 | 79 |
| 0031351 | 3 x 2 x 0.22 | 8.7 | 28.6 | 93 |
| 0031352 | 4 x 2 x 0.22 | 8.9 | 34.2 | 100 |
| 0031353 | 8 x 2 x 0.22 | 10.7 | 70 | 156 |
| 0031354 | 10 x 2 x 0.22 | 12 | 76 | 185 |
| 0031365 | 1 x 2 x 0.34 | 7.4 | 20 | 69 |
| 0031355 | 2 x 2 x 0.34 | 9.3 | 34.1 | 102 |
| 0031356 | 3 x 2 x 0.34 | 10 | 43 | 117 |
| 0031357 | 4 x 2 x 0.34 | 10.3 | 52.8 | 130 |
| 0031358 | 8 x 2 x 0.34 | 12.6 | 85.8 | 206 |
| 0031366 | 1 x 2 x 0.5 | 7.9 | 29 | 79 |
| 0031360 | 2 x 2 x 0.5 | 10.1 | 37 | 120 |
| 0031361 | 3 x 2 x 0.5 | 10.9 | 55 | 142 |
| 0031362 | 4 x 2 x 0.5 | 11.2 | 60 | 160 |
| 0031363 | 8 x 2 x 0.5 | 13.9 | 113.3 | 251 |
| 0031364 | 10 x 2 x 0.5 | 16 | 148 | 303 |

Last Update (08.10.2019)

©2019 Lapp Group - Technical changes reserved

 Product Management www.lappkabel.de

 You can find the current technical data in the corresponding data sheet:
 PN 0456 / 02_03_16

UNITRONIC® Li2YCY PiMF

Screened data transmission cable with PE core insulation and pairs in metalfoil

UNITRONIC® Li2YCY PiMF: Low-frequency low-capacitance screened PVC data cable with DIN 47100 coded PE core Pairs in Metal Foil, RS422/ RS485 interface wiring

Info

Metal foil screened pairs



Interference signals

Benefits

Data transmission cable with low capacitance, pair screening and overall copper braiding
Particularly suitable for wiring data systems and controls in large industrial plants
Individually screened pairs and the overall braid minimise electrical interference
Decoupling of circuits by means of
twisted-pair (TP) design (crosstalk effects)

Application range

For enhanced requirements in near-end cross-talk attenuation and high electrical interference in the circuits
Suitable for the transmission with varying in frequency and voltage or sensitive signals
Can be used multifunctional in electronics of computer systems, electronic control equipment, office machines, balances, etc.
For measurement value transmission and serial 2-wire interfaces
Intended for limited flexible use, and for fixed installation in dry or damp interiors

Product features

Flame-retardant according IEC 60332-1-2

Product Make-up

7-wire or fine-wire (from 1 mm²) strands made of bare copper wires
Core insulation made of polyethylene (PE)
Cores twisted into pairs

Last Update (08.10.2019)

©2019 Lapp Group - Technical changes reserved

Product Management www.lappkabel.de

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02_03.16

UNITRONIC® Li2YCY PiMF

Foil wrapping, static screening made of aluminium-laminated plastic film with copper drain wire for each pair
 Bare copper screen braiding
 Outer sheath made of PVC
 Outer sheath colour: pebble grey (RAL 7032)

Technical Data

| | |
|---------------------------|--|
| Classification ETIM 5: | ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable |
| Classification ETIM 6: | ETIM 6.0 Class-ID: EC000104 ETIM 6.0 Class-Description: Control cable |
| Core identification code: | 0.22 mm ² -0.5 mm ² : according to DIN 47100, see table T9 1.0 mm ² : a-core: white, b-core: black |
| Mutual capacitance: | At 800 Hz: 0.22 mm ² : max. 70 nF/km 0.34 mm ² : max. 70 nF/km 0.5 mm ² : max. 75 nF/km 1.0 mm ² : max. 85 nF/km |
| Inductivity: | Approx. 0.4 mH/km |
| Conductor stranding: | Stranded conductor, based on VDE 0881, 7-wire |
| Minimum bending radius: | Occasional flexing: 20 x outer diameter Fixed installation: 10 x outer diameter |
| Test voltage: | Core/core: 2000 V Core/screen: 1000 V |
| Characteristic impedance: | approx. 85 Ohm (> 1 MHz) |
| Temperature range: | Occasional flexing: -5 °C to +70 °C Fixed installation: -40 °C to +80 °C |

Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

TERMI-POINT® is a registered trademark of AMP

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

UNITRONIC® Li2YCY PiMF

| Article number | Number of pairs and mm ² per conductor | Outer diameter [mm] | Copper index (kg/km) | Weight (kg/km) |
|------------------------|---|---------------------|----------------------|----------------|
| UNITRONIC® Li2YCY PiMF | | | | |
| 7-wire | | | | |
| 0034040 | 2 x 2 x 0.22 | 7.7 | 33 | 75.4 |
| 0034041 | 3 x 2 x 0.22 | 8.1 | 42 | 86 |
| 0034042 | 4 x 2 x 0.22 | 8.7 | 50 | 99 |
| 0034043 | 8 x 2 x 0.22 | 10.9 | 85 | 161.4 |
| 0034044 | 10 x 2 x 0.22 | 12 | 100 | 186.4 |
| 0034045 | 2 x 2 x 0.34 | 9 | 43 | 70 |
| 0034046 | 3 x 2 x 0.34 | 9.4 | 55 | 85 |
| 0034047 | 4 x 2 x 0.34 | 9.8 | 64 | 103 |
| 0034048 | 8 x 2 x 0.34 | 12.9 | 127 | 191 |
| 0034060 | 2 x 2 x 0.5 | 9.9 | 51 | 96 |
| 0034061 | 3 x 2 x 0.5 | 10.4 | 66 | 116 |
| 0034062 | 4 x 2 x 0.5 | 11.3 | 71 | 141 |
| 0034063 | 5 x 2 x 0.5 | 11.8 | 92 | 180 |
| 0034064 | 8 x 2 x 0.5 | 14.5 | 153 | 271 |
| 0034065 | 10 x 2 x 0.5 | 16.6 | 182 | 327 |
| Fine wire | | | | |
| 0034070 | 2 x 2 x 1 | 11.7 | 82 | 126 |
| 0034071 | 3 x 2 x 1 | 11.8 | 109 | 196 |
| 0034072 | 4 x 2 x 1 | 12.7 | 133 | 220 |
| 0034073 | 10 x 2 x 1 | 19.7 | 326 | 492 |

Last Update (08.10.2019)

©2019 Lapp Group - Technical changes reserved

 Product Management www.lappkabel.de

 You can find the current technical data in the corresponding data sheet.
 PN 0456 / 02_03_16