

für feste Verlegung & flexible Anwendungen

for fixed installation & flexible applications



## Anwendung

als Datenübertragungs-, Steuer- und Verbindungsleitung vorwiegend zur Übertragung analoger und digitaler Signale in prozessgesteuerten Anlagen in der Mess-, Steuer- und Regeltechnik, für störfreie Daten- und Signalübertragung. Geeignet für feste Verlegung und flexible Anwendungen bei freier Bewegung ohne Zugbeanspruchung und ohne zwangsweise Führung. Für Verlegung in trockenen und feuchten Räumen, jedoch nicht im Freien ohne UV-Schutz und nicht im Erdreich.

## Application

data transmission cable, control and connecting cable predominantly for transmission of analog and digital signals in process controlled facilities in measurement and control technology for lossless transmission of data and signals. For fixed laying and flexible applications with undefined cable routing and without tensile stress. Suitable for use in dry and humid rooms. Outdoor use only with UV-protection, no laying underground.

## Besonderheiten

- weitgehend beständig gegen Säuren, Laugen und bestimmte Öle.
- LABS-frei/silikonfrei (bei Produktion)
- empfohlen für EMV gerechte Anwendung

## Special Features

- largely resistant to acids, bases and specified types of oil
- LABS-/silicone-free (during production)
- recommended for EMC-applications

## Hinweise

- RoHS-konform
- konform zur 2014/35/EU-Richtlinie ("Niederspannungsrichtlinie") CE
- Sonderausführungen, andere Abmessungen, Querschnitte, Ader- und Mantelfarben fertigen wir auf Anfrage

## Remarks

- conform to RoHS
- conform to 2014/35/EU-Guideline ("Low-Voltage Directive") CE
- We are pleased to produce special versions, other dimensions, core and jacket colours on request.

## Aufbau & Technische Daten

|                              |   |
|------------------------------|---|
| Leiter Werkstoff             | Cu-Litze blank  |
| Leiterklasse                 | nach IEC 60228 cl. 5; Ausnahme: 0,34 mm <sup>2</sup> , mehrdrähtig (7 x 0,25 mm)  |
| Aderisoliationswerkstoff     | PVC   |
| Aderkennung                  | nach DIN 47100 verschiedenfarbig  |
| Verseilung                   | Ader in Lagen verseilt  |
| Gesamtschirm                 | Cu-Geflecht verzinkt, opt. Bedeckung ca. 85%  |
| Außenmantelwerkstoff         | PVC   |
| Mantelfarbe                  | grau, RAL 7001; LIYCY Einzelader: grau RAL 7001 oder transparent  |
| Nennspannung                 | U <sub>0</sub> /U: 250 V; Spitzenspannung bei 0,14 mm <sup>2</sup> 350 V; > 0,14 mm <sup>2</sup> 500 V                          |
| Prüfspannung                 | bei 0,14 mm <sup>2</sup> Ader/Ader: 1,2 kV; Ader/Schirm: 1,0 kV > 0,14 mm <sup>2</sup> : Ader/Ader: 1,5 kV; Ader/Schirm: 1,0 kV |
| Leiterwiderstand             | nach IEC 60228 cl. 5  |
| Isoliationswiderstand        | min. 20 MΩ x km   |
| Strombelastbarkeit           | gem. DIN VDE, siehe Technischer Anhang  |
| Kapazität                    | Ader/Ader ca. 120 nF/km; Ader/Schirm ca. 160 nF/km  |
| kleinster Biegeradius fest   | bis 12 mm Ø 5 x d; bis 20 mm Ø 7,5 x d; > 20 mm Ø 10 x d  |
| kleinster Biegeradius bewegt | bis 12 mm Ø 10 x d; bis 20 mm Ø 15 x d; > 20 mm Ø 20 x d  |
| Betriebstemp. fest min/max   | -30 °C / +80 °C   |
| Betriebstemp. bew. min/max   | -5 °C / +70 °C  |
| Brandverhalten               | selbstverlöschend und flammwidrig nach IEC 60332-1  |
| Standard                     | in Anlehnung an DIN VDE 0812  |

## Structure & Specifications

|                             |  |
|-----------------------------|--|
| conductor material          | bare copper strand   |
| conductor class             | acc. to IEC 60228 cl. 5; exception: 0,34 mm <sup>2</sup> , stranded (7 x 0,25 mm)  |
| core insulation             | PVC  |
| core identification         | acc. to DIN 47100 different colours  |
| stranding                   | stranded in layers   |
| shield                      | copper braid tinned, coverage approx. 85%  |
| outer sheath                | PVC  |
| sheath colour               | grey, RAL 7001; LIYCY single core: grey RAL 7001 or transparent  |
| rated voltage               | U <sub>0</sub> /U: 250 V; peak-voltage on 0,14 mm <sup>2</sup> 350 V; > 0,14 mm <sup>2</sup> 500 V                             |
| testing voltage             | on 0,14 mm <sup>2</sup> core/core: 1,2 kV; core/shield: 1,0 kV > 0,14 mm <sup>2</sup> : core/core: 1,5 kV; core/shield: 1,0 kV |
| conductor resistance        | acc.to IEC 60228 cl. 5   |
| insulation resistance       | min. 20 MΩ x km  |
| current carrying capacity   | acc. to DIN VDE, see Technical Guidelines  |
| capacity                    | core/core ca. 120 nF/km; core/shield ca. 160 nF/km   |
| min. bending radius fixed   | up to 12 mm Ø 5 x d; up to 20 mm Ø 7,5 x d; > 20 mm Ø 10 x d   |
| min. bending radius moved   | up to 12 mm Ø 10 x d; up to 20 mm Ø 15 x d; > 20 mm Ø 20 x d   |
| operat. temp. fixed min/max | -30 °C / +80 °C  |
| operat. temp. moved min/max | -5 °C / +70 °C   |
| burning behavior            | self-extinguishing & flame-retardant acc.to IEC 60332-1  |
| standard                    | similar to DIN VDE 0812  |

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| Art.-Nr.<br>Item no.      | Abmessung<br>n x mm <sup>2</sup><br>dimension<br>n x mm <sup>2</sup> | Außen-Ø<br>mm<br>outer-Ø<br>mm | Cu-Zahl<br>kg/km<br>Cu index<br>kg/km | Gewicht<br>kg/km<br>weight<br>kg/km |
|---------------------------|--|--------------------------------|---------------------------------------|-------------------------------------|
| <b>ELITRONIC-CY LIYCY</b> |  |                                |                                       |                                     |
| 0500302                   | 2 X 0,14   | 3,7                            | 12,0                                  | 18,0                                |
| 0500325                   | 3 X 0,14   | 3,8                            | 13,0                                  | 22,0                                |
| 0500335                   | 4 X 0,14   | 4,1                            | 14,3                                  | 25,0                                |
| 0500345                   | 5 X 0,14   | 4,6                            | 15,5                                  | 31,0                                |
| 0500351                   | 6 X 0,14   | 4,8                            | 18,2                                  | 34,0                                |
| 0500357                   | 7 X 0,14   | 4,9                            | 19,0                                  | 38,0                                |
| 0500361                   | 8 X 0,14   | 5,3                            | 24,0                                  | 41,0                                |
| 0500254                   | 10 X 0,14  | 5,9                            | 29,0                                  | 49,0                                |
| 0500261                   | 12 X 0,14  | 6,1                            | 32,1                                  | 54,0                                |
| 0500268                   | 14 X 0,14  | 6,4                            | 35,0                                  | 63,0                                |
| 0500274                   | 16 X 0,14  | 7,0                            | 43,0                                  | 68,0                                |
| 0500286                   | 21 X 0,14  | 7,5                            | 55,5                                  | 80,0                                |
| 0500295                   | 25 X 0,14  | 8,2                            | 63,0                                  | 103,0                               |
| 0500298                   | 27 X 0,14  | 8,3                            | 83,0                                  | 104,0                               |
| 0500317                   | 36 X 0,14  | 9,3                            | 117,0                                 | 131,0                               |
| 0500331                   | 40 X 0,14  | 10,0                           | 126,0                                 | 152,0                               |
| 0500341                   | 50 X 0,14  | 11,1                           | 159,0                                 | 183,0                               |
| 0500633                   | 61 X 0,14  | 12,4                           | 142,0                                 | 232,0                               |
| 0500307                   | 2 X 0,25   | 4,3                            | 16,0                                  | 27,0                                |
| 0500327                   | 3 X 0,25   | 4,4                            | 21,0                                  | 30,0                                |
| 0500337                   | 4 X 0,25   | 4,8                            | 24,0                                  | 35,0                                |
| 0500348                   | 5 X 0,25   | 5,3                            | 29,0                                  | 44,0                                |
| 0500355                   | 6 X 0,25   | 5,7                            | 30,0                                  | 49,0                                |
| 0500358                   | 7 X 0,25   | 5,8                            | 37,0                                  | 52,0                                |
| 0500365                   | 8 X 0,25   | 6,2                            | 42,0                                  | 59,0                                |
| 0500259                   | 10 X 0,25  | 7,1                            | 46,0                                  | 71,0                                |
| 0500265                   | 12 X 0,25  | 7,3                            | 59,0                                  | 79,0                                |
| 0500270                   | 14 X 0,25  | 7,7                            | 62,0                                  | 88,0                                |
| 0500276                   | 16 X 0,25  | 8,1                            | 64,0                                  | 105,0                               |
| 0500280                   | 18 X 0,25  | 8,5                            | 83,0                                  | 114,0                               |
| 0500288                   | 21 X 0,25  | 9,0                            | 93,0                                  | 126,0                               |
| 0500293                   | 24 X 0,25  | 10,4                           | 112,0                                 | 156,0                               |
| 0500297                   | 25 X 0,25  | 10,5                           | 114,0                                 | 164,0                               |
| 0500320                   | 36 X 0,25  | 11,8                           | 148,0                                 | 210,0                               |
| 0500332                   | 40 X 0,25  | 12,3                           | 157,0                                 | 229,0                               |
| 0500342                   | 50 X 0,25  | 13,8                           | 178,0                                 | 298,0                               |
| 0500649                   | 61 X 0,25  | 15,0                           | 205,0                                 | 347,0                               |
| 0500308                   | 2 X 0,34   | 4,7                            | 21,0                                  | 31,0                                |
| 0500329                   | 3 X 0,34   | 4,9                            | 27,0                                  | 40,0                                |
| 0500339                   | 4 X 0,34   | 5,4                            | 28,0                                  | 48,0                                |
| 0500349                   | 5 X 0,34   | 5,8                            | 30,0                                  | 53,0                                |
| 0500356                   | 6 X 0,34   | 6,3                            | 45,0                                  | 60,0                                |
| 0500359                   | 7 X 0,34   | 6,4                            | 48,0                                  | 65,0                                |
| 0500366                   | 8 X 0,34   | 7,0                            | 52,0                                  | 75,0                                |
| 0500260                   | 10 X 0,34  | 7,9                            | 74,0                                  | 89,0                                |
| 0500264                   | 12 X 0,34  | 8,2                            | 80,0                                  | 113,0                               |
| 0500272                   | 14 X 0,34  | 8,6                            | 86,0                                  | 120,0                               |
| 0500277                   | 16 X 0,34  | 9,0                            | 94,0                                  | 132,0                               |
| 0500281                   | 18 X 0,34  | 9,8                            | 103,0                                 | 144,0                               |
| 0500287                   | 20 X 0,34  | 10,5                           | 112,0                                 | 169,0                               |
| 0500289                   | 21 X 0,34  | 10,7                           | 116,0                                 | 172,0                               |
| 0500291                   | 24 X 0,34  | 11,7                           | 132,0                                 | 199,0                               |
| 0506926                   | 25 X 0,34  | 11,7                           | 135,0                                 | 209,0                               |
| 0500300                   | 27 X 0,34  | 11,8                           | 148,0                                 | 217,0                               |
| 0500321                   | 36 X 0,34  | 13,2                           | 179,0                                 | 277,0                               |

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|--|--|--------------------------------|---------------------------------------|-------------------------------------|
| 0500333  | 40 X 0,34  | 14,1                           | 200,0                                 | 316,0                               |
| 0501782  | 50 X 0,34  | 15,9                           | 235,0                                 | 387,0                               |
| 0500350  | 61 X 0,34  | 16,8                           | 298,0                                 | 423,0                               |
| 0500580  | 2 X 0,5  | 5,2                            | 29,0                                  | 40,0                                |
| 0500600  | 3 X 0,5  | 5,5                            | 38,0                                  | 46,0                                |
| 0500619  | 4 X 0,5  | 6,0                            | 43,0                                  | 54,0                                |
| 0500640  | 5 X 0,5  | 6,3                            | 51,0                                  | 63,0                                |
| 0500658  | 6 X 0,5  | 7,0                            | 59,0                                  | 75,0                                |
| 0500653  | 7 X 0,5  | 7,2                            | 65,0                                  | 82,0                                |
| 0500667  | 8 X 0,5  | 7,7                            | 70,0                                  | 92,0                                |
| 0500530  | 10 X 0,5   | 8,8                            | 88,0                                  | 118,0                               |
| 0500534  | 12 X 0,5   | 9,1                            | 99,0                                  | 132,0                               |
| 0500547  | 16 X 0,5   | 10,6                           | 125,0                                 | 175,0                               |
| 0500551  | 18 X 0,5   | 11,1                           | 134,0                                 | 195,0                               |
| 0500559  | 20 X 0,5   | 11,9                           | 149,0                                 | 212,0                               |
| 0500566  | 24 X 0,5   | 12,8                           | 189,0                                 | 254,0                               |
| 0500570  | 25 X 0,5   | 13,3                           | 211,0                                 | 266,0                               |
| 0500586  | 2 X 0,75   | 5,9                            | 38,0                                  | 48,0                                |
| 0500602  | 3 X 0,75   | 6,1                            | 49,0                                  | 57,0                                |
| 0500623  | 4 X 0,75   | 6,7                            | 58,0                                  | 77,0                                |
| 0500641  | 5 X 0,75   | 7,3                            | 67,0                                  | 98,0                                |
| 0500650  | 6 X 0,75   | 7,9                            | 85,0                                  | 115,0                               |
| 0500655  | 7 X 0,75   | 8,1                            | 100,0                                 | 120,0                               |
| 0500659  | 8 X 0,75   | 8,4                            | 118,0                                 | 139,0                               |
| 0500531  | 10 X 0,75  | 10,5                           | 130,0                                 | 164,0                               |
| 0500537  | 12 X 0,75  | 10,8                           | 154,0                                 | 196,0                               |
| 0500552  | 18 X 0,75  | 12,6                           | 195,0                                 | 284,0                               |
| 0500571  | 25 X 0,75  | 15,2                           | 280,0                                 | 361,0                               |
| 0500588  | 2 X 1  | 6,1                            | 43,0                                  | 55,0                                |
| 0500606  | 3 X 1  | 6,5                            | 56,0                                  | 80,0                                |
| 0500626  | 4 X 1  | 7,0                            | 68,0                                  | 97,0                                |
| 0500644  | 5 X 1  | 7,6                            | 79,0                                  | 116,0                               |
| 0500665  | 7 X 1  | 8,4                            | 118,0                                 | 136,0                               |
| 0507308  | 8 X 1  | 9,0                            | 135,0                                 | 155,0                               |
| 0500673  | 9 X 1  | 9,3                            | 136,0                                 | 176,0                               |
| 0500532  | 10 X 1   | 10,9                           | 140,0                                 | 197,0                               |
| 0500538  | 12 X 1   | 11,4                           | 168,0                                 | 227,0                               |
| 0500553  | 18 X 1   | 13,4                           | 252,0                                 | 325,0                               |
| 0500775  | 20 X 1   | 14,5                           | 290,0                                 | 361,0                               |
| 0500568  | 24 X 1   | 15,6                           | 320,0                                 | 496,0                               |
| 0500589  | 2 X 1,5  | 7,1                            | 58,0                                  | 86,0                                |
| 0500605  | 3 X 1,5  | 7,4                            | 74,0                                  | 107,0                               |
| 0500628  | 4 X 1,5  | 8,1                            | 108,0                                 | 119,0                               |
| 0500645  | 5 X 1,5  | 8,9                            | 129,0                                 | 142,0                               |
| 0500657  | 7 X 1,5  | 9,8                            | 164,0                                 | 193,0                               |
| 0500539  | 12 X 1,5   | 13,0                           | 254,0                                 | 312,0                               |
| 0500554  | 18 X 1,5   | 15,9                           | 350,0                                 | 465,0                               |
| <b>ELITRONIC-CY LIYCY - Einzelader, grau / single core, grey</b> |  |                                |                                       |                                     |
| 0500563  | 1 X 0,14   | 2,6                            | 6,0                                   | 12,8                                |
| 0500523  | 1 X 0,25   | 3,0                            | 7,5                                   | 17,5                                |
| 0500524  | 1 X 0,50   | 3,4                            | 10,2                                  | 20,0                                |
| 0500525  | 1 X 0,75   | 3,6                            | 15,7                                  | 31,0                                |
| 0500526  | 1 X 1,00   | 3,7                            | 23,8                                  | 32,0                                |

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|--|--|--------------------------------|---------------------------------------|-------------------------------------|
| 0500527  | 1 X 1,50   | 4,0                            | 25,2                                  | 39,0                                |
| 0500774  | 1 X 2,50   | 5,8                            | 37,6                                  | 55,3                                |
| <b>ELITRONIC-CY LIYCY - Einzelader, transp. / single core, transp.</b> |  |                                |                                       |                                     |
| 0501025  | 1 X 0,14   | 2,6                            | 6,0                                   | 12,8                                |
| 0501026  | 1 X 0,25   | 3,0                            | 7,5                                   | 17,5                                |
| 0501027  | 1 X 0,50   | 3,4                            | 10,2                                  | 20,0                                |
| 0501030  | 1 X 0,75   | 3,6                            | 15,7                                  | 31,0                                |
| 0501031  | 1 X 1,00   | 3,7                            | 23,8                                  | 32,0                                |
| 0501032  | 1 X 1,50   | 4,0                            | 25,2                                  | 39,0                                |
| 0501033  | 1 X 2,50   | 5,8                            | 37,6                                  | 55,3                                |