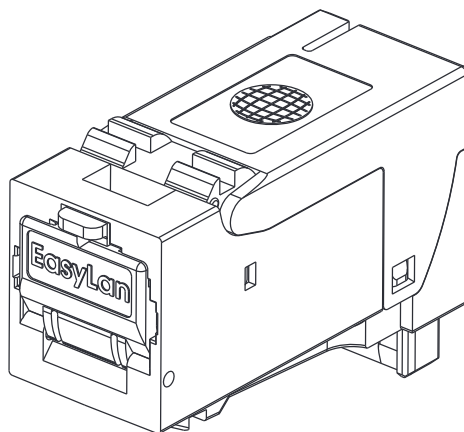


# Technical Data sheet

## *fixLink<sup>®</sup> SL Cat. 6<sub>A</sub> ISO/IEC*

AWG 24 - AWG 22

**Article No.: CKFAK001 / CKFAK001EP**



|                            |                                                                                      |                                                                                  |                                  |                                                                                              |            |    |                                                                                                                                                  |
|----------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------|------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------|
| f<br>e<br>d<br>c<br>b<br>a | changing<br>changing<br>changing<br>PoE überarbeitet<br>Bestellcode<br>Neuerstellung | 24.01.2023<br>03.11.2022<br>01.10.2020<br>17.07.2017<br>09.03.2017<br>20.10.2015 | MW<br>MW<br>LP<br>MJ<br>GF<br>MJ | drawn                                                                                        | 20.10.2015 | MJ |  <b>EasyLan<sup>®</sup></b><br>...for a better connectivity |
|                            |                                                                                      |                                                                                  |                                  | appr.                                                                                        | 21.10.2015 | GF |                                                                                                                                                  |
|                            |                                                                                      |                                                                                  |                                  | Titel:<br><b>fixLink<sup>®</sup> SL Cat. 6<sub>A</sub> ISO/IEC</b><br><b>AWG 24 - AWG 22</b> |            |    |                                                                                                                                                  |
|                            |                                                                                      |                                                                                  |                                  | Drawing number:<br><b>ZN-CU151082</b>                                                        |            |    |                                                                                                                                                  |
|                            |                                                                                      |                                                                                  |                                  |                                                                                              |            |    |                                                                                                                                                  |
| Index                      | Revision code                                                                        | Date                                                                             | Name                             |                                                                                              |            |    | Dimensions: mm                                                                                                                                   |
|                            |                                                                                      |                                                                                  |                                  |                                                                                              |            |    | Original: DIN A4                                                                                                                                 |
|                            |                                                                                      |                                                                                  |                                  |                                                                                              |            |    | Sheet 1 of 4                                                                                                                                     |

# Technical Data

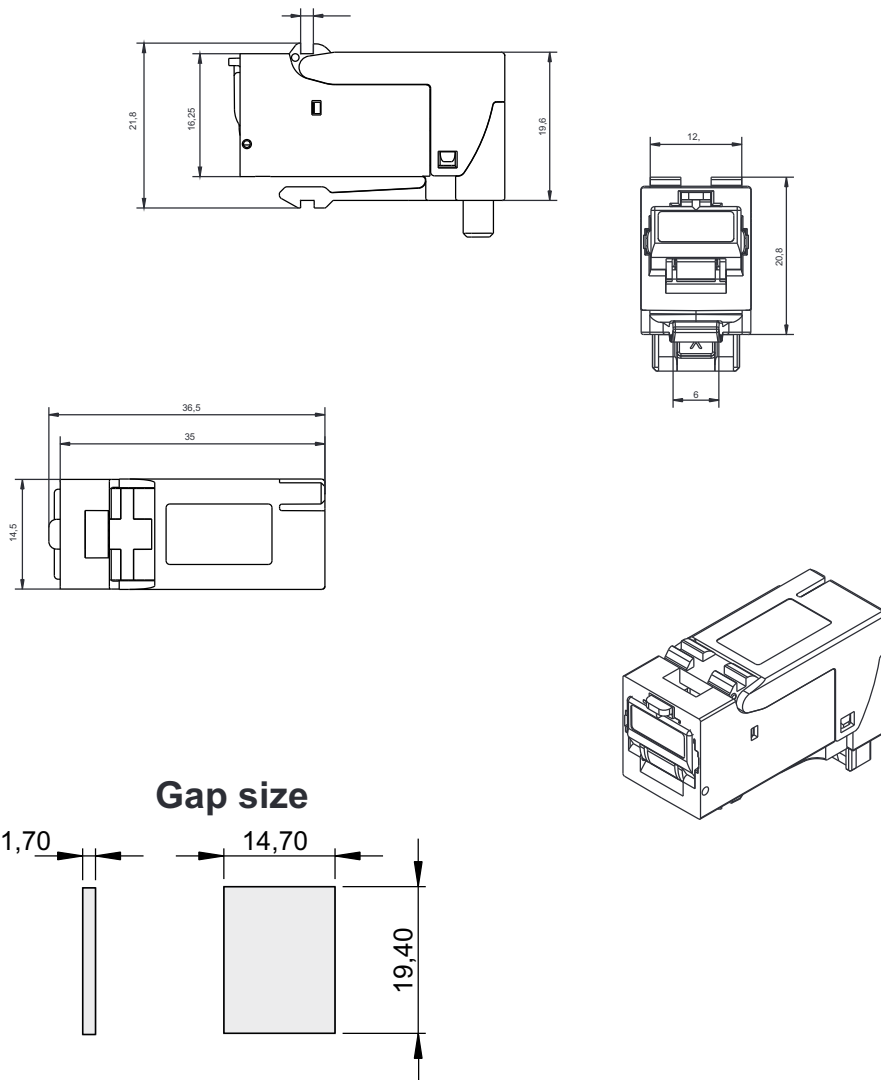
|                                   |                                                   |
|-----------------------------------|---------------------------------------------------|
| <b>Connector Standard</b>         | IEC 60603-7-51                                    |
| <b>Mechanical Characteristics</b> |                                                   |
| Life (mating cycles)              | ≥ 750                                             |
| Insertion force                   | ≤ 30N                                             |
| Conductor diameter                | massiv / solid 0,51-0,65 mm / AWG 24/1 - AWG 22/1 |
| Insulation diameter               | 5 - 9 mm                                          |
| Reusable (Module)                 | ≤ 5 cycles with the same diameter                 |
| EC Directive 2002/95/EC (RoHS)    | RoHS-compliant                                    |
| <b>Materials</b>                  |                                                   |
| Housing                           | zinc diecast                                      |
| Strain-relief sliver              | zinc diecast                                      |
| Surface                           | nickel plated                                     |
| Shield spring                     | stainless steel                                   |
| PCB                               | FR-4                                              |
| PCB finish                        | HAL lead-free                                     |
| Contacts                          | spring steel                                      |
| Contact finish                    | 1,27 µm / 50µin Au                                |
| Insulation housing                | PA light green (RAL 6027)                         |
| Contact support plate             | PC yellow (RAL 1021)                              |
| Dust protection Cover             | PC clear                                          |
| IDC                               | CuNi2Si                                           |
| IDC finish                        | min. 3-6 µm (120-240µin) Sn                       |
| <b>Environmental Requirements</b> |                                                   |
| Particulate ingress               | IP2X                                              |
| Water ingress                     | IPX0                                              |
| Ambient temperature               | -40°C to +85°C                                    |
| Packaging material                | bio-degradable                                    |
| <b>Electrical Characteristics</b> |                                                   |
| Contact resistance                | ≤ 20 mΩ                                           |
| Insulation resistance             | ≥ 500 MΩ                                          |
| Voltage proof - contact-contact   | ≥ 1000 V (DC)                                     |
| Voltage proof - contact-shield    | ≥ 1500 V (DC)                                     |
| Current carrying capacity at 50°C | 1,25 A                                            |
| 4PPoE according to IEEE802.3bt    | Suitable                                          |
| Transfer Impedance at 1 MHz       | ≤ 100 mΩ                                          |
| Transfer Impedance at 10 MHz      | ≤ 200 mΩ                                          |
| Transfer Impedance at 80 MHz      | ≤ 1600 mΩ                                         |

|                            |                                                                                      |                                                                                  |                                  |                                                                                                                                       |            |    |
|----------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------|----|
| f<br>e<br>d<br>c<br>b<br>a | changing<br>changing<br>changing<br>PoE überarbeitet<br>Bestellcode<br>Neuerstellung | 24.01.2023<br>03.11.2022<br>01.10.2020<br>17.07.2017<br>09.03.2017<br>20.10.2015 | MW<br>MW<br>LP<br>MJ<br>GF<br>MJ | drawn                                                                                                                                 | 20.10.2015 | MJ |
|                            |                                                                                      |                                                                                  |                                  | appr.                                                                                                                                 | 21.10.2015 | GF |
|                            |                                                                                      |                                                                                  |                                  | Titel:                                                                                                                                |            |    |
|                            |                                                                                      |                                                                                  |                                  | fixLink® SL Cat. 6 <sub>A</sub> ISO/IEC<br>AWG 24 - AWG 22                                                                            |            |    |
| Index                      | Revision code                                                                        | Date                                                                             | Name                             | Drawing number:                                                                                                                       |            |    |
|                            |                                                                                      |                                                                                  |                                  | ZN-CU151082                                                                                                                           |            |    |
|                            |                                                                                      |                                                                                  |                                  |  <b>EasyLan®</b><br>...for a better connectivity |            |    |
|                            |                                                                                      |                                                                                  |                                  | Dimensions: mm                                                                                                                        |            |    |
|                            |                                                                                      |                                                                                  |                                  | Original: DIN A4                                                                                                                      |            |    |
|                            |                                                                                      |                                                                                  |                                  | Sheet 2 of 4                                                                                                                          |            |    |

# Technical Data

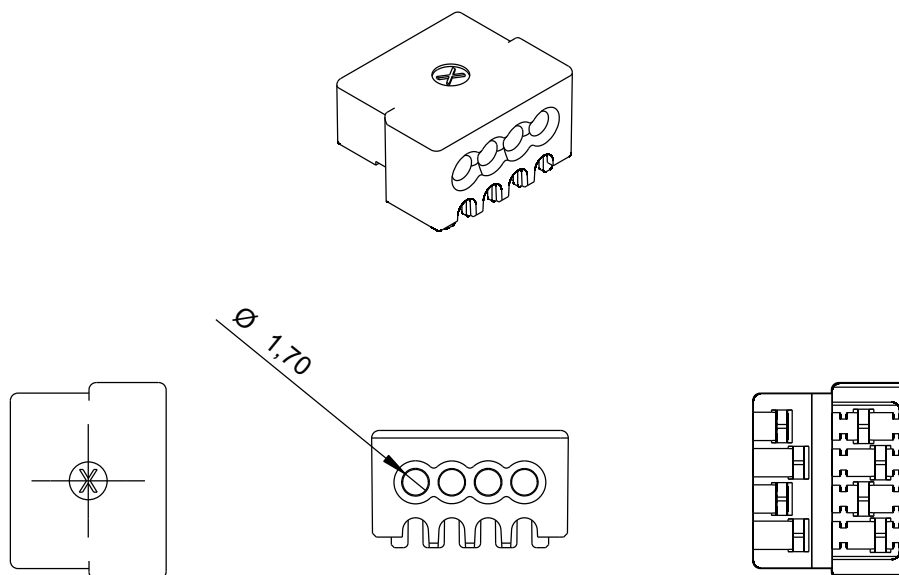
| Transmission Performance                 |                                                                                                                                           |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 10 Gigabit Ethernet acc. to IEEE 802.3an | adequate                                                                                                                                  |
| GHMT approved (PoE type III / IV)        | DIN IEC 60512-99-001:2015 & DIN IEC 60512-9-3:2010                                                                                        |
| Categorie 6 <sub>A</sub>                 | ISO/IEC 11801; DIN EN 50173-1                                                                                                             |
| Class EA                                 | acc. ISO/IEC 11801 Amendment 1/2<br>typical link length > 2 m, in combination with a CP-cable:<br>CP-Link typ. > 10 m 10 GbE is supported |

## Drawing

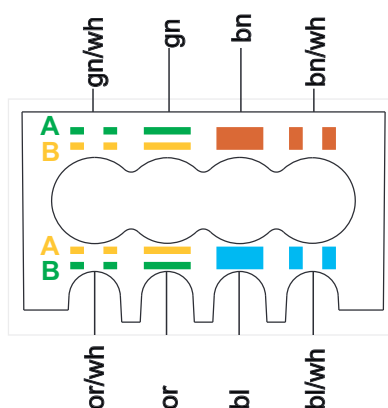
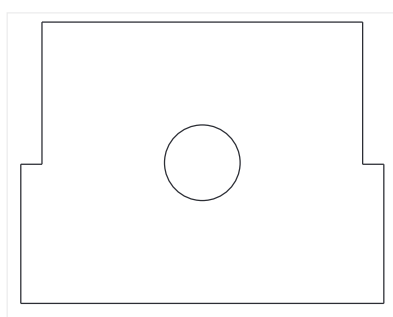


|                            |                                                                                      |                                                                                  |                                  |                                                                                                                                                  |            |    |
|----------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------|----|
| f<br>e<br>d<br>c<br>b<br>a | changing<br>changing<br>changing<br>PoE überarbeitet<br>Bestellcode<br>Neuerstellung | 24.01.2023<br>03.11.2022<br>01.10.2020<br>17.07.2017<br>09.03.2017<br>20.10.2015 | MW<br>MW<br>LP<br>MJ<br>GF<br>MJ | drawn                                                                                                                                            | 20.10.2015 | MJ |
|                            |                                                                                      |                                                                                  |                                  | appr.                                                                                                                                            | 21.10.2015 | GF |
|                            |                                                                                      |                                                                                  |                                  | Titel:<br><b>fixLink<sup>®</sup> SL Cat. 6<sub>A</sub> ISO/IEC</b><br><b>AWG 24 - AWG 22</b>                                                     |            |    |
|                            |                                                                                      |                                                                                  |                                  | Drawing number:<br><b>ZN-CU151082</b>                                                                                                            |            |    |
| Index                      | Revision code                                                                        | Date                                                                             | Name                             |  <b>EasyLan<sup>®</sup></b><br>...for a better connectivity |            |    |
|                            |                                                                                      |                                                                                  |                                  | Dimensions: mm                                                                                                                                   |            |    |
|                            |                                                                                      |                                                                                  |                                  | Original: DIN A4                                                                                                                                 |            |    |
|                            |                                                                                      |                                                                                  |                                  | Sheet 3 of 4                                                                                                                                     |            |    |

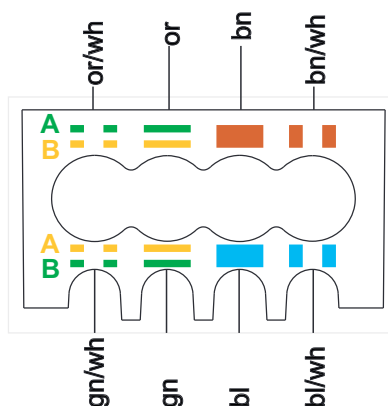
## Drawing



## Configuration



Configuration to  
TIA/EIA 568 A



Configuration to  
TIA/EIA 568 B

|                            |                                                                                      |                                                                                  |                                  |                                                                                                                                       |            |    |
|----------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------|----|
| f<br>e<br>d<br>c<br>b<br>a | changing<br>changing<br>changing<br>PoE überarbeitet<br>Bestellcode<br>Neuerstellung | 24.01.2023<br>03.11.2022<br>01.10.2020<br>17.07.2017<br>09.03.2017<br>20.10.2015 | MW<br>MW<br>LP<br>MJ<br>GF<br>MJ | drawn                                                                                                                                 | 20.10.2015 | MJ |
|                            |                                                                                      |                                                                                  |                                  | appr.                                                                                                                                 | 21.10.2015 | GF |
|                            |                                                                                      |                                                                                  |                                  | Titel:<br><b>fixLink® SL Cat. 6<sub>A</sub> ISO/IEC</b><br>AWG 24 - AWG 22                                                            |            |    |
|                            |                                                                                      |                                                                                  |                                  | Drawing number:<br><b>ZN-CU151082</b>                                                                                                 |            |    |
| Index                      | Revision code                                                                        | Date                                                                             | Name                             |  <b>EasyLan®</b><br>...for a better connectivity |            |    |
|                            |                                                                                      |                                                                                  |                                  | Dimensions: mm                                                                                                                        |            |    |
|                            |                                                                                      |                                                                                  |                                  | Original: DIN A4                                                                                                                      |            |    |
|                            |                                                                                      |                                                                                  |                                  | Sheet 4 of 4                                                                                                                          |            |    |