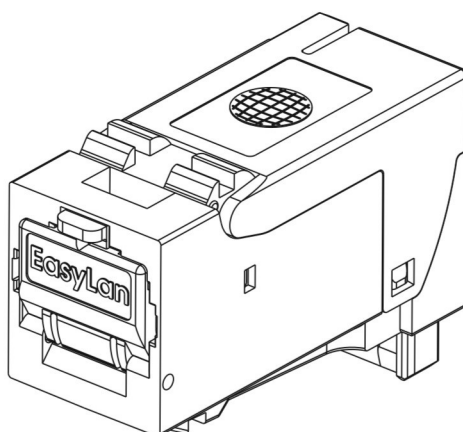


# Technical Data sheet

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

AWG 24 - AWG 22

**Article No.: CKFAK001 / CKFAK001EP**



|                                 |                                                                                                  |                                                                                                |                                        |                                                                                              |               |      |                                                                                                                                                  |
|---------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------------------------------------------------------------|---------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| g<br>f<br>e<br>d<br>c<br>b<br>a | changing<br>changing<br>changing<br>changing<br>PoE überarbeitet<br>Bestellcode<br>Neuerstellung | 14.07.2025<br>24.01.2023<br>03.11.2022<br>01.10.2020<br>17.07.2017<br>09.03.2017<br>20.10.2015 | TG<br>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 |                                                                                                                                                  |
| Original: DIN A4                |                                                                                                  |                                                                                                |                                        |                                                                                              |               |      |                                                                                                                                                  |
| Sheet 1 of 4                    |                                                                                                  |                                                                                                |                                        |                                                                                              |               |      |                                                                                                                                                  |

# Technical Data

|                                       |                                                   |
|---------------------------------------|---------------------------------------------------|
| <b>Connector Standard</b>             | IEC 60603-7-51                                    |
| <b>Mechanical Characteristics</b>     |                                                   |
| Life (RJ45 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                                    |
| Design compatibility                  | yes                                               |
| Keystone format                       | yes                                               |
| <b>Materials</b>                      |                                                   |
| Housing                               | zinc diecast                                      |
| Standard dust cover                   | inklusive                                         |
| 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 / 30µin 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                       |
| Panel spring                          | die-cast zinc                                     |
| Transport lock                        | bioplastic                                        |
| Protection class                      | IP20                                              |
| <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                                            |
| Shielded                              | yes                                               |
| PoE (IEEE 802.af) 15,4W               | adequate                                          |
| PoE+ (IEEE 802.3at) 30W               | adequate                                          |
| PoE++ / 4PPoE (IEEE 802.3bt) bis 100W | adequate                                          |
| Transfer Impedance at 1 MHz           | ≤ 100 mΩ                                          |
| Transfer Impedance at 10 MHz          | ≤ 200 mΩ                                          |
| Transfer Impedance at 80 MHz          | ≤ 1600 mΩ                                         |

|                                 |                                                                                                  |                                                                                                |                                        |                                                            |            |    |
|---------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------|------------|----|
| g<br>f<br>e<br>d<br>c<br>b<br>a | changing<br>changing<br>changing<br>changing<br>PoE überarbeitet<br>Bestellcode<br>Neuerstellung | 14.07.2025<br>24.01.2023<br>03.11.2022<br>01.10.2020<br>17.07.2017<br>09.03.2017<br>20.10.2015 | TG<br>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 |            |    |
|                                 |                                                                                                  |                                                                                                |                                        | Drawing number:                                            |            |    |
| Index                           | Revision code                                                                                    | Date                                                                                           | Name                                   | ZN-CU151082                                                |            |    |



## EasyLan®

...for a better connectivity

Dimensions: mm

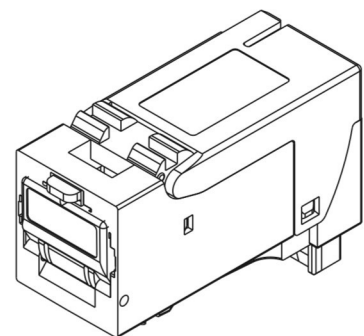
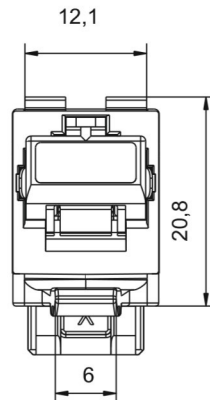
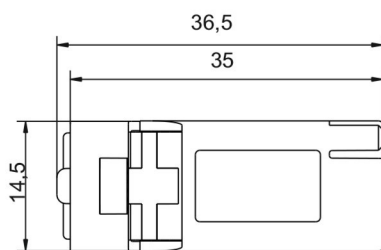
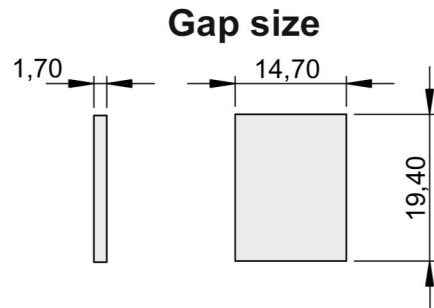
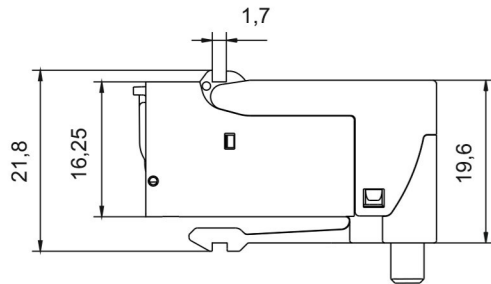
Original: DIN A4

Sheet 2 of 4

# Technical Data

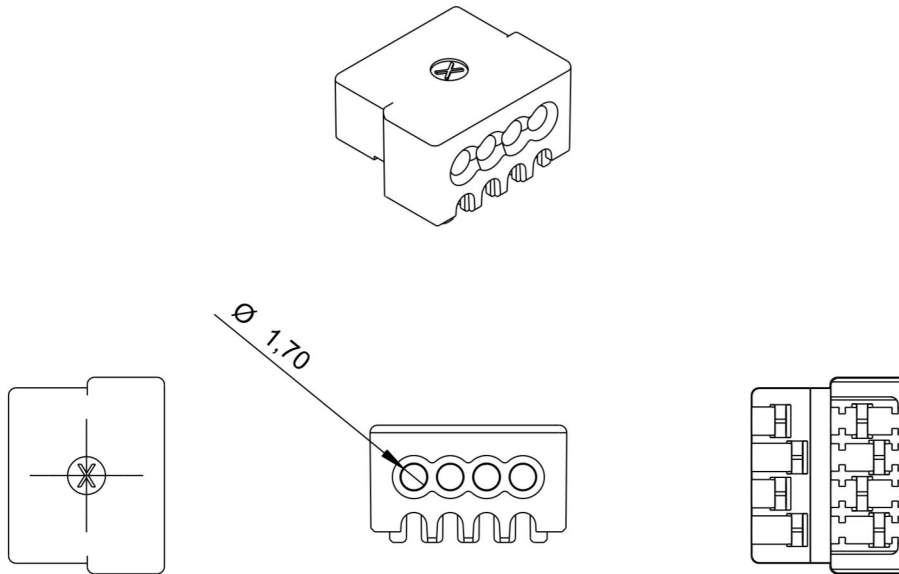
| Environmental Requirements               |                                                                                                                                           |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Particulate ingress                      | IP2X                                                                                                                                      |
| Water ingress                            | IPX0                                                                                                                                      |
| Ambient temperature                      | -40°C to +85°C                                                                                                                            |
| Packaging material                       | bio-degradable                                                                                                                            |
| Transmission Performance                 |                                                                                                                                           |
| 10 Gigabit Ethernet acc. to IEEE 802.3an | adequate                                                                                                                                  |
| GHMT PVP                                 | certified                                                                                                                                 |
| GHMT approved (PoE type III / IV)        | DIN IEC 60512-99-001:2015 & DIN IEC 60512-9-3:2010                                                                                        |
| Categorie 6                              | ISO/IEC 11801                                                                                                                             |
| Categorie 6 <sub>A</sub>                 | ISO/IEC 11801; EIA/TIA 568; 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

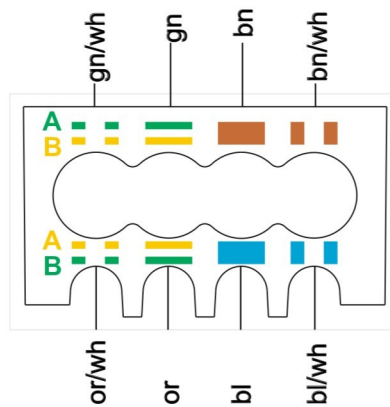
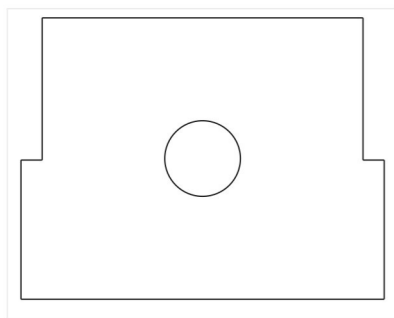


|                                                                                            |                                                                                                                                                             |                                                                                                                                                           |                                                                                                   |                                                                                                                                                                                   |            |    |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----|
| <div>g</div> <div>f</div> <div>e</div> <div>d</div> <div>c</div> <div>b</div> <div>a</div> | <div>changing</div> <div>changing</div> <div>changing</div> <div>changing</div> <div>PoE überarbeitet</div> <div>Bestellcode</div> <div>Neuerstellung</div> | <div>14.07.2025</div> <div>24.01.2023</div> <div>03.11.2022</div> <div>01.10.2020</div> <div>17.07.2017</div> <div>09.03.2017</div> <div>20.10.2015</div> | <div>TG</div> <div>MW</div> <div>MW</div> <div>LP</div> <div>MJ</div> <div>GF</div> <div>MJ</div> | 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>                                                                                                                                             |            |    |
|                                                                                            |                                                                                                                                                             |                                                                                                                                                           |                                                                                                   | <div>  <b>EasyLan<sup>®</sup></b><br/>           ...for a better connectivity         </div> |            |    |
| Index                                                                                      | Revision code                                                                                                                                               | Date                                                                                                                                                      | Name                                                                                              | Dimensions: mm                                                                                                                                                                    |            |    |
|                                                                                            |                                                                                                                                                             |                                                                                                                                                           |                                                                                                   | Original: DIN A4                                                                                                                                                                  |            |    |
|                                                                                            |                                                                                                                                                             |                                                                                                                                                           |                                                                                                   | Sheet 3 of 4                                                                                                                                                                      |            |    |

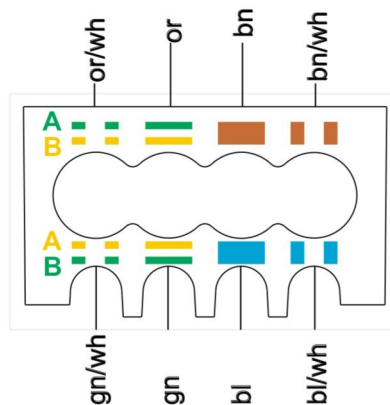
## Drawing



## Configuration



Configuration to  
TIA/EIA 568 A



Configuration to  
TIA/EIA 568 B

|       |                  |            |      |                                                            |            |    |                                                                                                                                       |
|-------|------------------|------------|------|------------------------------------------------------------|------------|----|---------------------------------------------------------------------------------------------------------------------------------------|
|       |                  |            |      | drawn                                                      | 20.10.2015 | MJ |  <b>EasyLan®</b><br>...for a better connectivity |
|       |                  |            |      | appr.                                                      | 21.10.2015 | GF |                                                                                                                                       |
|       |                  |            |      | Titel:                                                     |            |    |                                                                                                                                       |
|       |                  |            |      | fixLink® SL Cat. 6 <sub>A</sub> ISO/IEC<br>AWG 24 - AWG 22 |            |    |                                                                                                                                       |
| g     | changing         | 14.07.2025 | TG   | Drawing number:                                            |            |    | Dimensions: mm                                                                                                                        |
| f     | changing         | 24.01.2023 | MW   |                                                            |            |    |                                                                                                                                       |
| e     | changing         | 03.11.2022 | MW   |                                                            |            |    |                                                                                                                                       |
| d     | changing         | 01.10.2020 | LP   |                                                            |            |    |                                                                                                                                       |
| c     | PoE überarbeitet | 17.07.2017 | MJ   | Original: DIN A4                                           |            |    | Sheet 4 of 4                                                                                                                          |
| b     | Bestellcode      | 09.03.2017 | GF   |                                                            |            |    |                                                                                                                                       |
| a     | Neuerstellung    | 20.10.2015 | MJ   |                                                            |            |    |                                                                                                                                       |
|       |                  |            |      |                                                            |            |    |                                                                                                                                       |
| Index | Revision code    | Date       | Name | ZN-CU151082                                                |            |    |                                                                                                                                       |