LioN-Link BusHead DeviceNet-Slave

LioN-Link BusHead IP 67 bus coupler module for the connection between the higher level fieldbus and the fieldbus independent I/O modules, with M12 bus connection, rotary switches for addressing, M12 LioN-Link connection, M12 power supply connection

### Bit Assignment

<table>
<thead>
<tr>
<th>Bit</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Byte 0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>US1</td>
<td>US2</td>
<td>KS1</td>
<td>KS2</td>
</tr>
<tr>
<td>Byte 1</td>
<td>DIAG</td>
<td>S.8</td>
<td>DIAG</td>
<td>S.7</td>
<td>DIAG</td>
<td>S.6</td>
<td>DIAG</td>
<td>S.5</td>
</tr>
<tr>
<td>Byte 2</td>
<td>DIAG</td>
<td>S.16</td>
<td>DIAG</td>
<td>S.15</td>
<td>DIAG</td>
<td>S.14</td>
<td>DIAG</td>
<td>S.13</td>
</tr>
<tr>
<td>Byte 3</td>
<td>DIAG</td>
<td>S.18</td>
<td>DIAG</td>
<td>S.17</td>
<td>DIAG</td>
<td>S.16</td>
<td>DIAG</td>
<td>S.15</td>
</tr>
</tbody>
</table>

**USx:** Low voltage Line x  
**KSx:** Short circuit on Line x  
**DIAG S.x:** Diagnostic message I/O module x  
**STATUS S.x:** Configuration error I/O module x

### Diagnostic Indication

<table>
<thead>
<tr>
<th>LED</th>
<th>Indication</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/O Line 1, I/O Line 2</td>
<td>red</td>
<td>wrong configuration / module exchanged</td>
</tr>
<tr>
<td></td>
<td>green</td>
<td>online, communication with PLC</td>
</tr>
<tr>
<td></td>
<td>off</td>
<td>branch not in use (module not connected)</td>
</tr>
<tr>
<td>Us</td>
<td>green</td>
<td>power supply of fieldbus interface</td>
</tr>
<tr>
<td>Us1</td>
<td>green</td>
<td>sensor/system power supply Line 1</td>
</tr>
<tr>
<td>Us2</td>
<td>green</td>
<td>sensor/system power supply Line 2</td>
</tr>
<tr>
<td>MS</td>
<td>green</td>
<td>device is ready for operating</td>
</tr>
<tr>
<td></td>
<td>green flashing</td>
<td>wrong configuration</td>
</tr>
<tr>
<td></td>
<td>red</td>
<td>unrecoverable fault</td>
</tr>
<tr>
<td></td>
<td>red flashing</td>
<td>recoverable fault</td>
</tr>
<tr>
<td></td>
<td>red/green flashing</td>
<td>self test is running</td>
</tr>
<tr>
<td>NS</td>
<td>green</td>
<td>online, communication with PLC</td>
</tr>
<tr>
<td></td>
<td>green flashing</td>
<td>online, no communication with PLC</td>
</tr>
<tr>
<td></td>
<td>red flashing</td>
<td>failed communication device, BUS-OFF status, duplicate MAC-ID</td>
</tr>
</tbody>
</table>

### Pin Assignment

<table>
<thead>
<tr>
<th>Bus connection M12</th>
<th>Lion-Link connection M12</th>
<th>Power supply M12</th>
</tr>
</thead>
</table>
| 1 = Drain  
2 = 24 V  
3 = GND (0 V)  
4 = CAN_H  
5 = CAN_L  
Housing / = Earth | 1 = Drain  
2 = 24 V Sensor/System  
3 = 0 V Sensor/System  
4 = Data +  
5 = Data - | 1 = +24 V  
2 = +24 V  
3 = 0 V  
4 = Data +  
5 = Earth |
## Be Certain with Belden

### LioN-Link BusHead DeviceNet-Slave
0940 DSL 601

#### Technical Data

**Environmental**
- Degree of protection: IP 67
- Operating temperature range: -10°C (+14°F) to +60°C (+140°F)

**Mechanical**
- Weight: 200 g
- Housing material: PBT

**Bus system**
- DeviceNet
- EDS file: 00_0940DSL601.eds
- Transmission rate: max. 500 kBaud
- Address range: 1–63 dec
- Rotary address switches: 1–63 dec
- Default address: 63 dec

**Supply of the fieldbus interface**
- Us
  - Rated voltage: 24 V DC
  - Voltage range: 11–30 V DC
  - Power consumption: typ. 10 mA
  - Reverse polarity protection: yes
  - Indication: LED green

**System/sensors power supply**
- Us1, Us2*
  - Rated voltage: 24 V DC
  - Voltage range: 19–30 V DC
  - Power consumption: typ. 50 mA
  - Reverse polarity protection: yes
  - Indication: LED green
  - Output current per branch: max. 3 A

**Included in delivery/accessories**
- Dust covers M12, attachable labels

* Both supply points on the BusHead must always be connected.

### Diagnostic

- Diagnosis for communication status, module breakdown and periphery faults in the Link system

### Purpose

- A maximum of 16 LioN-Link I/O modules can be operated on this BusHead

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**Part Number**

0940 DSL 601

The application of these products in harsh environments should always be checked before use.
Specifications subject to alteration.