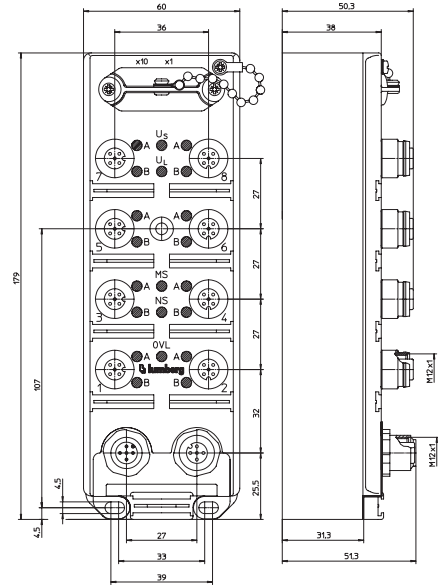**DeviceNet**

# DeviceNet I/O Modules with 16-Digital Inputs

**0930 DSL 109**

## 16 IN (n)

DeviceNet device with 16 digital inputs (n-switching) to connect standard sensors, M12 socket, rotary switches for addressing, M12 bus connection.
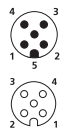
## Bit Assignment

| Bit | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---|---|---|---|---|---|---|---|---|
| **M12 Input** | | | | | | | | |
| **Byte 0** | 8A | 7A | 6A | 5A | 4A | 3A | 2A | 1A |
| **Byte 1** | 8B | 7B | 6B | 5B | 4B | 3B | 2B | 1B |
| **Diagnostic: Input** | | | | | | | | |
| **Byte 2** | OVL | - | - | - | - | - | - | - |

OVL: Overload status

## Diagnostic Indication

| LED | Indication | Condition |
|---|---|---|
| 1...8 A/B | yellow | channel status |
| U$_S$ | green | sensor power supply |
| U$_L$ | green | system power supply |
| OVL | red | sensor short-circuit / sensor overload |
| MS (Module status) | green | device is ready for operating |
| | green flashing | incorrect or incomplete configuration |
| | red | unrecoverable fault |
| | red flashing | recoverable fault |
| | red/green flashing | self test is running |
| NS (Network status) | green | online, communication with PLC |
| | green flashing | online, no communication with PLC |
| | red flashing | time-out state of one or more I/O connections |
| | red | failed communication device, BUS-OFF Status, duplicate MAC-ID |

## Pin Assignment

| Bus connection M12 | | Input M12 | |
|---|---|---|---|
| | 1 = Drain | | 1 = +24 V |
| | 2 = 24 V [1] | | 2 = IN B |
| | 3 = GND (0 V) [1] | | 3 = GND (0 V) |
| | 4 = CAN_H | | 4 = In A |
| | 5 = CAN_L | | 5 = earth |

1 = system/sensors

**Be Certain with Belden**

## DeviceNet I/O Modules with 16-Digital Inputs
0930 DSL 109

### Technical Data

**Environmental**
| | |
|---|---|
| Degree of protection | IP 67 |
| Operating temperature range | -0°C (+32°F) to +60°C (+140°F) |

**Mechanical**
| | |
|---|---|
| Weight | 570 g |
| Housing material | PUR |

**Bus system** — DeviceNet
| | |
|---|---|
| Transmission rate | max. 500 kBaud |
| AutobaUd | yes |
| Address range | 0–63 dec |
| Rotary address switches | 0–63 dec |
| Default address | 63 dec |

**Electronics power supply** — $U_L$
| | |
|---|---|
| Rated voltage | 24 V DC |
| Voltage range | 11–30 V DC |
| Power consumption | max. 80 mA |
| Reverse polarity protection | yes |
| Indication | LED green |

**Input power supply** — Us
| | |
|---|---|
| Voltage range min. | $(U_{System} - 1.5\ V)$ |
| Sensor current | max. 800 mA |
| Short circuit-proof | yes |
| Indication | LED green |

**Inputs**
| | |
|---|---|
| Rated input voltage | 24 V DC |
| Signal state "1" | < (US - 11V) |
| Signal state "0" | > (Us - 5 V) |
| Input current at 6 V | -10 mA |
| Channel type N.O. | n-switching |
| Number of digital channels | 16 |
| Channel status indicator | LED yellow per channel |

**Included in delivery/accessories**
| | |
|---|---|
| Dust covers M12 | 2 pieces |
| Attachable labels | 10 pieces |

**Communication modes**
Polled I/O message connection
Change of state/ cyclic message connection
Explicit message connection

**NOTE**: EDS-files can be downloaded from our website
**http://www.beldensolutions.com/en/Service/Downloadcenter/
Software_Lumberg/index.phtml**

| Part Number |
|---|
| 0930 DSL 109 |

UL