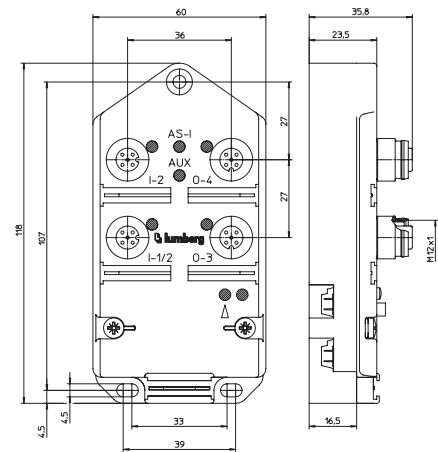**0910 ASL 410**

# AS-Interface Module with 2-Digital Inputs and 2-Digital Outputs

## 2 IN / 2 OUT

AS-Interface flat cable module with 2 digital inputs to connect standard sensors and 2 digital outputs to connect standard actuators, combined M12 socket, infrared interface for the addressing.

– Version 2.1 –

## Bit Assignment

| Bit | - | - | - | - | 3 | 2 | 1 | 0 |
|-----|---|---|---|---|---|---|---|---|
| **M12 Input** | | | | | | | | |
| Byte 0 | - | - | - | - | - | - | I-2 | I-1/2 |
| **M12 Output** | | | | | | | | |
| Byte 0 | - | - | - | - | O-4 | O-3 | - | - |

## Diagnostic Indication

| LED | Indication | Condition |
|-----|------------|-----------|
| 0-1..4 / 0-3..4 | yellow | channel status |
| U-AS-i | green | AS-Interface power supply active |
| AUX | green | actuator supply active |
| FID | red | communication error |
|  | red flashing | periphery error (actuator short circuit) |

## Pin Assignments

| Input 1 M12 | Input 2 M12 | Output 3 M12 | Output 4 M12 |
|-------------|-------------|--------------|--------------|
| 1 = +24 V | 1 = +24 V | 1 = n.c. | 1 = n.c. |
| 2 = IN 2 | 2 = n.c. | 2 = n.c. | 2 = n.c. |
| 3 = GND (0 V) | 3 = GND (0 V) | 3 = GND (0 V) | 3 = GND (0 V) |
| 4 = IN 1 | 4 = IN 2 | 4 = OUT 3 | 4 = OUT 4 |
| 5 = earth | 5 = earth | 5 = earth | 5 = earth |

The connection to earth for the inputs and outputs is implemented via the earthing contacts at the fastening holes.

# Be Certain with Belden

## AS-Interface Module with 2-Digital Inputs and 2-Digital Outputs
0910 ASL 410

### Technical Data

**Environmental**
| | |
|---|---|
| Degree of protection | IP 67 |
| Operating temperature range | -25°C (-13°F) to +80°C (+176°F) |
| Weight | 200 g |
| Housing material | PUR |

**Bus system** — **AS-Interface Version 2.1**
| | |
|---|---|
| AS-Interface profile | S 3.F.E |
| I/O configuration | 3 hex |
| ID code | F hex |
| ID2 code (extended ID-code) | E hex |
| Support A/B addressing | no |

**Electronics power supply** — **AS-Interface**
| | |
|---|---|
| Rated voltage | AS-Interface net |
| Voltage range | 26.5–31.6 V DC |
| Power consumption | max. 250 mA |
| Reverse polarity protection | yes |
| Indication | LED green |

**Input power supply**
| | |
|---|---|
| Voltage range (AS-Interface net) | 17–30 V |
| Total current of all sensors | max. 200 mA |
| Short circuit-proof | yes |

**Inputs** — **Type 2 acc. to IEC 61131-2**
| | |
|---|---|
| Rated input voltage | 24 V DC |
| Signal state "1" | Us > 11 V / Is > 6 mA |
| Signal state "0" | Is < 2 mA |
| Input current at 24 V | 15 mA |
| Input circuit | p-switching |
| Number of digital channels | 2 |
| Channel status indicator | LED yellow per channel |

**Output power supply** — **AUX**
| | |
|---|---|
| Rated voltage | 24 V DC |
| Voltage range | 10–30 V |
| Potential separation | present |
| Reverse polarity protection | yes/electronic |
| Indication | LED green |

**Outputs** — **Type 2 A acc. to IEC 61131-2**
| | |
|---|---|
| Rated output current | 2 A per channel |
| Short circuit-proof | yes |
| Max. output current | 4 A per module |
| Overload-proof | yes |
| Number of digital channels | 2 |
| Channel type N.O. | p-switching |
| Channel status indicator | LED yellow per channel |

**Diagnostic**
| | |
|---|---|
| Indication | LED red |

**Included in delivery / Accessories**
| | |
|---|---|
| Dust covers M12 | 2 pieces |
| Attachable label | 10 pieces |

### Note

The input channels are connected together. That allows a greater connection flexibility (see pin assignment). In case of connection of a two-channel sensor to input socket 1 a further sensor must not be plugged to input socket 2 respectively due to the Y wiring of the inputs.

| Part Number |
|---|
| 0910 ASL 410 |

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