



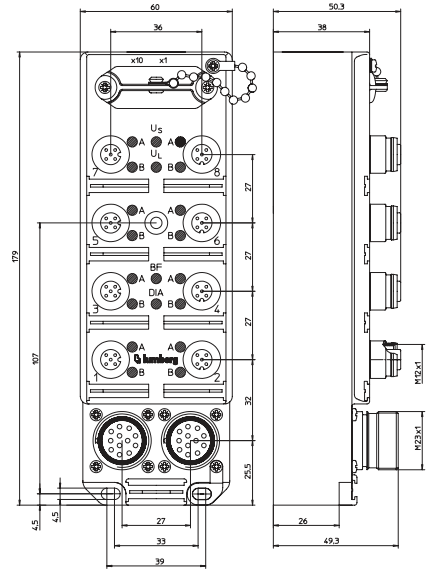
## Profibus I/O Modules with 16-Digital Inputs

0970 PSL 209



### 16 IN

Profibus-DP device with 16 digital inputs to connect standard sensors, combined M12 socket, rotary switches for addressing, M23 bus connection.



### Bit Assignment

Bit	7	6	5	4	3	2	1	0
<b>M12 Input</b>								
Byte 0	8B	7A	6A	5A	4A	3A	2A	1A
Byte 1	8B	7B	6B	5B	4B	3B	2B	1B
<b>Diagnostic</b>								
DIA-Byte	-	-	-	OVL	-	-	-	-

OVL: Overload status

### Diagnostic Indication

LED	Indication	Condition
1...8 A/B	yellow	channel status
Us	green	sensor/system power supply
UL	green	module electronic supply active
BF	red	bus error
DIA	red	module diagnostics (sensor short-circuit / sensor overload)

### Pin Assignment

#### Bus connection M23



- 1 = GNDI<sup>1</sup>
- 2 = Line A
- 3 = n.c.
- 4 = Line B
- 5 = n.c.
- 6 = VCCI<sup>1</sup>
- 7 = +24 V
- 8 = GND (0 V)
- 9 = Erde / earth
- 10 = n.c.
- 11 = n.c.
- 12 = RTS<sup>1</sup>
- housing = earth

#### Input M12



- 1 = +24 V
- 2 = IN B
- 3 = GND (0 V)
- 4 = IN A
- 5 = Earth

1 = internal signals



Be Certain with Belden

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### Technical Data

#### Environmental

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

#### Mechanical

Weight 545 g  
 Housing material PUR

#### Bus system

**Profibus**  
 ID number 044E hex  
 GSD file Lum\_044E.gsd  
 Transmission rate max. 12 MBaud  
 Address range 1–126 dec  
 Rotary address switches 1–99 dec  
 Default address 99 dec

#### Electronics power supply

**UL**  
 Rated voltage 24 V DC  
 Voltage range 19–30 V DC  
 Power consumption typ. 60 mA  
 Reverse polarity protection yes  
 Indication LED green

#### Input power supply

**US**  
 Voltage range min. (UL - 1.5 V)  
 Total current of all sensors max. 800 mA  
 Short circuit-proof yes  
 Indication LED green

#### Inputs

**Type 3 acc. to IEC 61131-2L**  
 Rated input voltage 24 V DC  
 Signal state "1" 11–30 V  
 Signal state "0" -3–5 V  
 Input current at 24 V typ. 6 mA  
 Channel type N.O. p-switching  
 Number of digital channels 16  
 Channel status indicator LED yellow per channel

#### Diagnostic

Module diagnostic and single channel diagnostic according to Profibus specification (please see operating instructions under [www.beldensolutions.com/downloads](http://www.beldensolutions.com/downloads))

### Included in delivery/accessories

Dust covers M12 2 pieces  
 Attachable labels 10 pieces

**Part Number**

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