



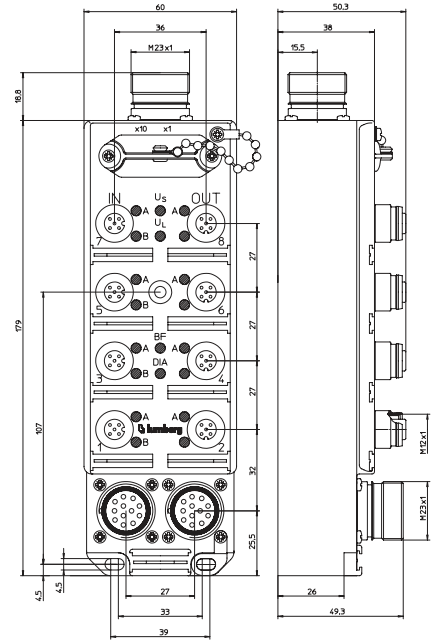
0970 PSL 211



## Profibus I/O Modules with 8-Digital Inputs and 4-Digital Outputs

### 8 IN / 4 OUT

Profibus-DP device with 8 digital inputs to connect standard sensors and 4 digital outputs to connect standard actuators, combined M12 socket, rotary switches for addressing, M23 bus connection, M23 actuator supply.



### Bit Assignment

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

UVA: Undervoltage actuator  
 ASC: Actuator short-circuit  
 OVL: Overload status

### Diagnostic Indication

LED	Indication	Condition
1, 3, 5, 7 A/B 2, 4, 6, 8 A	yellow	channel status
2, 4, 6, 8	red	actuator short-circuit
U <sub>s</sub>	green	actuator supply active
U <sub>l</sub>	green	module electronic supply active
BF	red	bus error
DIA	red	module diagnostics (sensor short-circuit / sensor overload)

### Pin Assignment

Bus connection M23	Actuator supply M23	Input/Output M12	
<ul style="list-style-type: none"> <li>1 = GNDI<sup>1</sup></li> <li>2 = Line A</li> <li>3 = n.c.</li> <li>4 = Line B</li> <li>5 = n.c.</li> <li>6 = VCCI<sup>1</sup></li> <li>7 = +24 V</li> <li>8 = GND (0 V)</li> <li>9 = Erde / earth</li> <li>10 = n.c.</li> <li>11 = n.c.</li> <li>12 = RTS<sup>1</sup></li> <li>housing = earth</li> </ul>	<ul style="list-style-type: none"> <li>1 = Earth</li> <li>2 = +24 V</li> <li>3 = GND (0 V)</li> <li>4 = n.c.</li> <li>5 = n.c.</li> <li>6 = n.c.</li> </ul>	<ul style="list-style-type: none"> <li>1 = +24 V</li> <li>2 = IN B</li> <li>3 = GND (0 V)</li> <li>4 = IN A</li> <li>5 = Earth</li> <li>1 = n.c.</li> <li>2 = n.c.</li> <li>3 = GND (0 V)</li> <li>4 = OUT</li> <li>5 = Earth</li> </ul>	1 = internal signals



Be Certain with Belden

**Profibus I/O Modules with 8-Digital Inputs and 4-Digital Outputs**

0970 PSL 211

**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**

ID number 0450 hex  
 GSD file Lum\_0450.gsd  
 Transmission rate max. 12 MBaud  
 Address range 1–126 dec  
 Rotary address switches 1–99 dec  
 Default address 99 dec

**Electronics power supply**

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**

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

**Inputs**

Rated input voltage 24 V DC  
 Signal state "1" 11–30 V  
 Signal state "0" -3–5 V  
 Input current at 24V typ. 6 mA  
 Channel type N.O. p-switching  
 Number of digital channels 8  
 Channel status indicator LED yellow per channel

**Output power supply**

Rated voltage  
 Voltage range  
 Potential separation  
 Reverse polarity protection  
 Indication

**Outputs**

Rated output current  
 Short circuit-proof  
 Max. output current  
 Overload-proof  
 Number of digital channels  
 Channel type N.O.  
 Channel status indicator  
 Diagnostic indication

**Included in delivery/accessories**

Dust covers M12 2 pieces  
 Attachable labels 10 pieces

**Us**

Rated voltage 24 V DC  
 Voltage range 19–30 V DC  
 Potential separation present  
 Reverse polarity protection yes/antiparallel diode  
 Indication LED green

**Type 2 A acc. to IEC 61131-2**

Rated output current 2 A per channel  
 Short circuit-proof yes  
 Max. output current 8 A per module  
 Overload-proof yes  
 Number of digital channels 4  
 Channel type N.O. p-switching  
 Channel status indicator LED yellow per channel  
 Diagnostic indication LED red per channel

**Part Number**

0970 PSL 211



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