



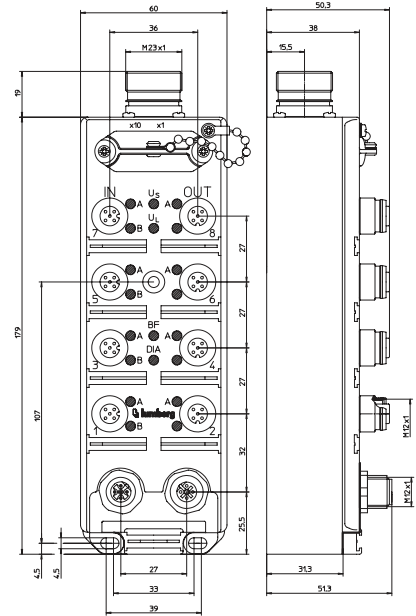
0970 PSL 113



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, M12 bus connection, M23 power supply.



Bit Assignment

Bit	7	6	5	4	3	2	1	0
M12 Input								
Byte 0	7B	5B	3B	1B	7A	5A	3A	1A
M12 Output								
Byte 0	-	-	-	-	8	6	4	2
Diagnostic								
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
Us	green	actuator supply active
UL	green	module electronic supply active
BF	red	bus error
DIA	red	module diagnostics (sensor short-circuit / sensor overload / actuator low voltage / actuator short-circuit / actuator overload)

Pin Assignment

Bus connection M12	Power supply M23	Input/Output M12	
<p>1 = +5 V¹ 2 = Line A 3 = GND (0 V)¹ 4 = Line B 5 = earth</p>	<p>1 = Earth 2 = +24 V² 3 = GND (0 V)² 4 = +24 V³ 5 = GND (0 V)³ 6 = n.c.</p>	<p>1 = +24 V 2 = IN B 3 = GND (0 V) 4 = IN A 5 = Earth</p> <p>1 = n.c. 2 = n.c. 3 = GND (0 V) 4 = OUT 5 = Earth</p>	<p>1 = internal signals 2 = actuators 3 = system</p>



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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 535 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
 Attachable labels

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

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.