



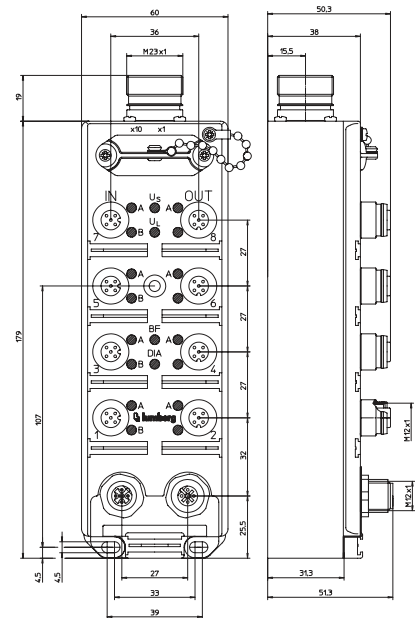
0970 PSL 113



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
1 = +5 V¹ 2 = Line A 3 = GND (0 V)¹ 4 = Line B 5 = earth	1 = Earth 2 = +24 V² 3 = GND (0 V)² 4 = +24 V³ 5 = GND (0 V)³ 6 = n.c.	1 = +24 V 2 = IN B 3 = GND (0 V) 4 = IN A 5 = Earth 1 = n.c. 2 = n.c. 3 = GND (0 V) 4 = OUT 5 = Earth

1 = internal signals
2 = actuators
3 = system



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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	Profibus 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	UL 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	Type 3 acc. to IEC 61131-2 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

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

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