



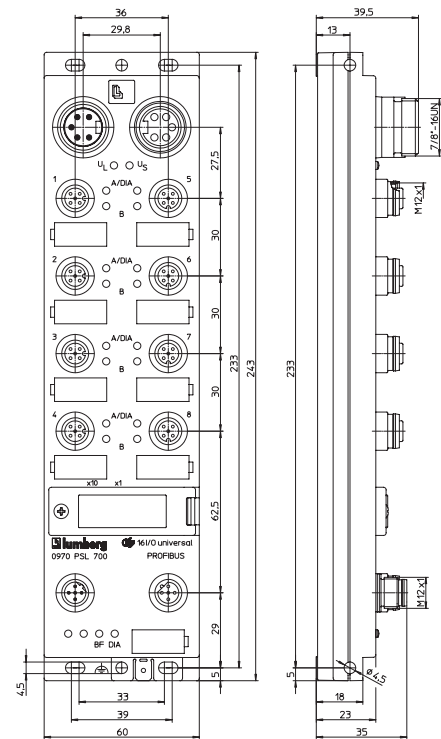
0970 PSL 700



Profibus I/O Modules with 16-Digital Inputs and 16-Digital Outputs

16 IN / 16 OUT (universal)

Profibus-DP device with 16 digital I/O channels, channels can be used universally as inputs or outputs, combined 12 socket, rotary switches for addressing, M12 bus connection, 7/8" power supply.



Bit Assignment

Bit	7	6	5	4	3	2	1	0
M12 Input								
Byte 0	4B	4A	3B	3A	2B	2A	1B	1A
Byte 1	8B	8A	7B	7A	6B	6A	5B	5A
M12 Output								
Byte 0	4B	4A	3B	3A	2B	2A	1B	1A
Byte 1	8B	8A	7B	7A	6B	6A	5B	5A

Diagnostic Indication

LED	Indication	Condition
1...8 A/B	yellow	channel status
1...8 A/DIA	red	periphery fault
Us	green	sensor/system power supply
BF	red	bus error
DIA	red	common indication for periphery faults

Pin Assignment

Bus connection M12	Power supply 7/8"	Input M12	
<p>1 = +5 V¹ 2 = Line A - GN 3 = GND (0 V)¹ 4 = Line B - RD 5 = earth housing = earth</p>	<p>1 = GND (0 V)² 2 = GND (0 V)³ 3 = Earth 4 = +24 V³ 5 = +24 V²</p>	<p>1 = +24 V 2 = IN/OUT B 3 = GND (0 V) 4 = IN/OUT A 5 = Earth</p>	<p>1 = internal signals: galvanically separated to sensors 2 = actuators 3 = system sensors</p>



Be Certain with Belden

Profibus I/O Modules with 16-Digital Inputs and 16-Digital Outputs

0970 PSL 700

Technical Data

Environmental

Degree of protection	IP 67
Operating temperature range	-10°C (+14°F) to +60°C (+140°F)

Mechanical

Weight	380 g
Housing material	PBT

Bus system

ID number	Profibus
GSD file	09CA hex
Transmission rate	Lum_09CA.GSD
Address range	max. 12 MBaud
Rotary address switches	1–125 dec
Default address	1–99 dec
	99 dec

System/Sensors power supply

Rated voltage	24 V DC
Voltage range	19–30 V DC
Power consumption	120 mA
Reverse polarity protection	yes

Input power supply

Voltage range	Us
Sensor current	min. (U _{System} - 1.5 V)
Short circuit-proof	100 mA (at Tamb 30°C) per socket
Indication	yes
	LED green

Inputs

Rated input voltage	Type 3 acc. to IEC 61131-2
Channel type N.O.	24 V DC
Number of digital channels	p-switching
Channel status indicator	max. 16
Diagnostic indication	LED yellow per channel
	LED red per channel

Output power supply

Rated voltage	UL
Voltage range	24 V DC
Reverse polarity protection	19–30 V DC
Indication	yes/antiparallel diode
Optional disengageable actuator	LED green
DIP-switch.	Optional disengageable actuator low-voltage detection over integrated

Outputs

Rated output current	1.6 A per channel
Short circuit-proof	yes
Max. output current	9 A (12 A*) per module

*Test proven and approved under the following conditions:

- looped through System/Sensorpower supply max. 2,5 A
- Power supply cable STL 204 (5 x 1.00 mm²)
- Operating temperature range max. 40°C

Overload-proof	yes
Number of digital channels	max. 16
Channel type N.O.	p-switching
Channel status indicator	LED yellow per channel
Diagnostic indication	LED red per channel/socket

Diagnostic

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

Included in delivery/accessories

Dust covers M12	2 pieces
Attachable labels	10 pieces

Part Number

0970 PSL 700



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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Lumberg Automation:](#)

[0970 PSL 700](#)