lumbergautomation
A BELDEN BRAND



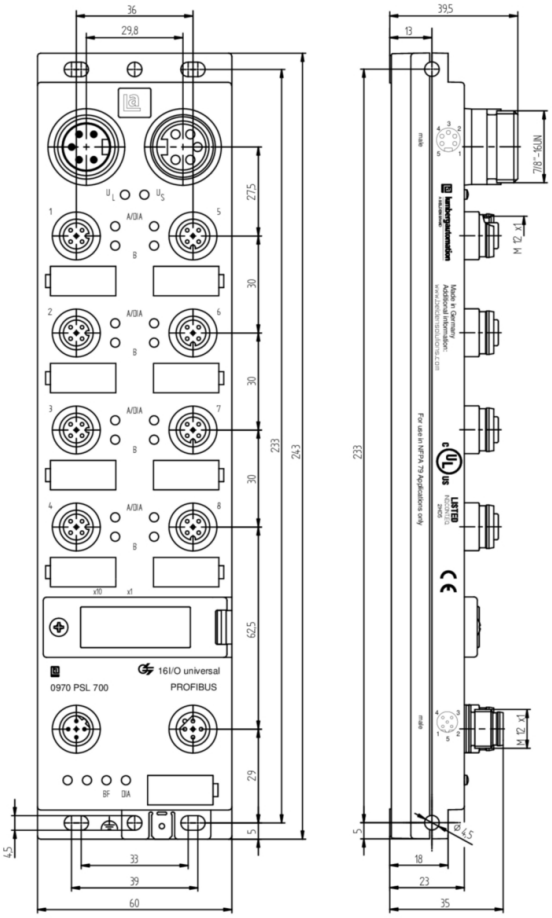
Product: 0970 PSL 700

LioN-M, PROFIBUS I/O Device, 16DIO (8x M12), 7/8" Power Supply, Plastic, 60 mm

Product Description

LioN-M M12-60, Plastic, PROFIBUS, M12 Bus Connector, B-coded, 16 DIO, 7/8" Power Supply, 5-poles

Technical Drawing



Technical Specifications

Product Description

Brand:	Belden
Product Family:	I/O Systems: Active - Standalone
Side 1 Product Sub Family:	LioN-M
Item Description:	0970 PSL 700
Part Number:	75514
Device Type:	I/O Module

Protocol Compatibility:	PROFIBUS
I/O Function:	16DIO
Bus Connection:	M12, 5-poles, B-coded
Power Supply Connection:	7/8" Power, 5-poles
I/O Connection:	M12, 5-poles, A-coded
I/O Type:	Digital In-/Output (Universal)

General Data

Housing Material:	PBT + ASA
Housing Color:	Black
Protection Degree / IP Rating**:	IP67
Potted:	No
Dimensions (W x H x D):	60 mm x 40 mm x 243 mm
Weight:	390 g
Ambient Temperature (Operation)*:	-10 °C to 60 °C
Vibration Resistance:	10 g / 5 -500 Hz
Shock Resistance:	50 g / 11ms
Contact Base Material:	M12, B-coded, CuSn, Gold-plated | 7/8" CuZn, Gold-plated
Contact Bearer Material:	PA / TPU
O-Ring Material:	FKM
Mount Type:	2 hole screw mounting. Use standard M4 x 25 / 30 screws with toothed lock washer (as per DIN 125) and self-locking nuts.
Fastening Torque (Fixing Screw):	M4: 1 Nm
Fastening Torque (Ground Connection (FE)):	M4: 1 Nm
Fastening Torque (Bus Connection):	M12: 0.5 Nm
Fastening Torque (Power Connection):	7/8": 1.5 Nm
Fastening Torque (I/O Connection):	M12: 0.5 Nm
Included in Delivery:	Attachable Labels: 15x, Sealing Caps: 4x M12

PROFIBUS

Connection:	M12, 5-poles, B-coded
Number of Connections:	2
Transmission Rate:	9.6 kbps … 12 Mbps
Transmission Rate Adjustment:	Automatically with start of the communication
Addressing via Rotary Address Switches:	1 ...99 dec
Addressing via PROFIBUS:	1 …125 dec
ID Number:	09CA hex

Power Supply

Connection Module Supply Voltage:	7/8" Power, 5-poles
Number of Connections:	2
Current Carrying Capacity of Connector:	max. 9 A
Module Supply Voltage (Nominal):	24 V DC (SELV/PELV)
Module Supply Voltage (Range):	19 V DC to 30 V DC
Current Consumption (typ.):	70 mA (at 24 V DC)
Reverse Polarity Protection:	Yes
Status Indicator (System Supply):	LED green
Diagnostic Indicator:	No
Connection Sensor Supply Voltage:	via Module Supply Connection
Current Carrying Capacity of Connector:	max. 9 A
Sensor Supply Voltage (Nominal):	24 V DC (SELV/PELV)
Sensor Supply Voltage (Range):	19 V DC to 30 V DC
Reverse Polarity Protection:	Yes
Status Indicator (Sensor Supply):	LED green
Diagnostic Indicator:	No
Connection Actuator Supply Voltage:	via Module Supply Connection
Current Carrying Capacity of Connector:	max. 9 A
Actuator Supply Voltage (Nominal):	24 V DC (SELV/PELV)

Actuator Supply Voltage (Range):	19 V DC to 30 V DC
Reverse Polarity Protection:	Yes
Status Indicator (Actuator Supply):	LED green
Diagnostic Indicator:	No

Digital Input Channels

Number of Digital Input Channels:	max. 16, universal
Connection:	M12, 5-poles, A-coded
Number of Ports:	8x, X1 to X8
Channel Type:	Type 3 acc. to IEC 61131-2
Input Wiring:	2-, 3-, 4-wire
Nominal Voltage:	24 V DC via US (module power supply)
Nominal Current:	typ. 5 mA
Sensor Current Supply:	max. 200 mA per port (at 30°C)
Sensor Type:	PNP
Input Voltage Range "0" signal:	-3 V DC …+5 V DC
Input Voltage Range "1" signal:	11 V DC … 30 V DC
Input Filter Time:	1 ms, fixed
Protective Circuit:	Electronicaly: Overload protection, short-circuit protection
Status Indicator (Inputs):	LED yellow per channel
Diagnostic Indicator:	LED red per port

Digital Output Channels

Number of Digital Output Channels:	max. 16, universal
Connection:	M12, 5-poles, A-coded
Number of Ports:	8x, X1 to X8
Channel Type:	p-switching
Output Wiring:	2-, 3-wire
Nominal Voltage:	24 V DC via UL (actuator power supply)
Output Current per Channel:	max. 1.6 A
Output Current per Module:	max. 9 A
Galvanically Isolated:	No
Protective Circuit:	Electronicaly: Overload protection, short-circuit protection
Overload Behavior:	Auto off and on switching / Manual restart
Status Indicator (Outputs):	LED yellow per channel
Diagnostic Idicator:	LED red per channel

Electrical Isolation

US (System Supply Voltage) / FE:	500 V DC
US / UL (Actuator Supply Voltage):	500 V DC
UL / FE:	500 V DC
Bus connection / FE:	500 V DC

EMC Conformance

EMC Directive:	2014/30/EU
EN 61000-4-2 Electrostatic Discharge (ESD):	Criterion B; 4 kV contact discharge, 8 kV air discharge
EN 61000-4-3 Electromagnetic Field:	Criterion A; Field intensity: 10 V/m
EN 61000-4-4 Fast Transients (Burst):	Criterion B, 2 kV
EN 61000-4-5 Surge Voltage:	Criterion B; DC supply lines: ±0.5 kV/±0.5 kV (symmetrical/asymmetrical); For I/O ports with cables ≤ 30m
EN 61000-4-6 Conducted immunity:	Criterion A; Test voltage 10 V
EN 55022 Radio Interference Properties:	Class A

Safety & Environmental Compliance

CE:	Yes
RoHS Compliant:	Yes

Approvals

UL:	cULus Listed, UL 508

UL-File:	E230848

Notes

Protection Degree / IP Rating Note:	** only if mounted and locked in combination with Hirschmann / Lumberg Automation connector.
System Power Supply Connection Note:	*do not connect / disconnect under voltage!
Update and Revision:	Revision Number: 0.48 Revision Date: 05-24-2023

© 2026 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.