lumbergautomation
A BELDEN BRAND

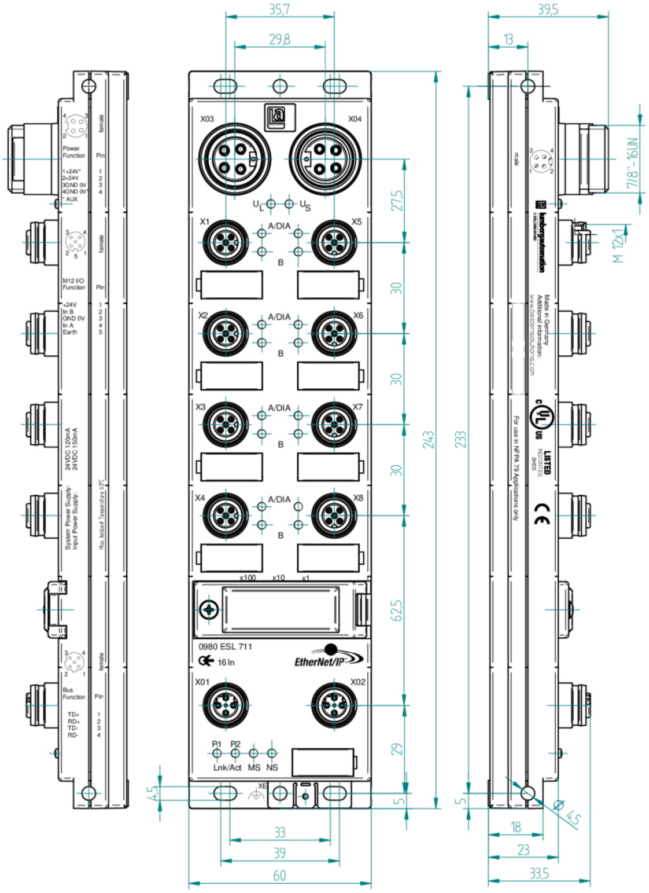
Product: 0980 ESL 711

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

Product Description

LioN-M M12-60, Plastic, EtherNet/IP, 16 DI, 7/8" Power Supply, 4-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:	0980 ESL 711
Part Number:	109630
Device Type:	I/O Module

Protocol Compatibility:	EtherNet/IP
I/O Function:	16DI
Bus Connection:	M12, 4-poles, D-coded
Power Supply Connection:	7/8" Power, 4-poles
I/O Connection:	M12, 5-poles, A-coded
I/O Type:	Digital Input

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, D-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

EtherNet/IP

Protocol (EtherNet/IP):	EtherNet/IP
Connection:	M12 LAN, 4-poles, D-coded
Number of Connections:	2
Specification:	CIP Edition 3.9 / EIP Adaption of CIP 1.1x
Transmission Rate:	Fast Ethernet (10/100 Mbit/s), Full Duplex
Transmission Method:	100 BASE-TX, with auto negotiation and auto crossing
Cycle Time / Requested Packet Interval (RPI):	min. 1 ms
Addressing:	BootP, DHCP, Rotary Address Switches
Address Switches Range:	0 to 255 dec
Connection Types:	Input Only, Listen Only
Device Level Ring (DLR):	Supported, beacon based
Quick Connect (QC):	Not supported
Supported Network Protocols (Other):	ACD, ARP, BootP, DHCP, HTTP, IGMP, Ping, TCP/IP

Power Supply

Connection Module Supply Voltage:	7/8" Power, 4-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.):	100 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

Digital Input Channels

Number of Digital Input Channels:	max. 16, fixed
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:	3 ms, fixed
Protective Circuit:	Electronicaly: Overload protection, short-circuit protection
Status Indicator (Inputs):	LED yellow per channel
Diagnostic Indicator:	LED red per port

Electrical Isolation

US (System Supply Voltage) / FE:	500 V DC
Bus connection / FE:	2000 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
ODVA:	Yes

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: 0.69 Revision Date: 02-20-2026

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