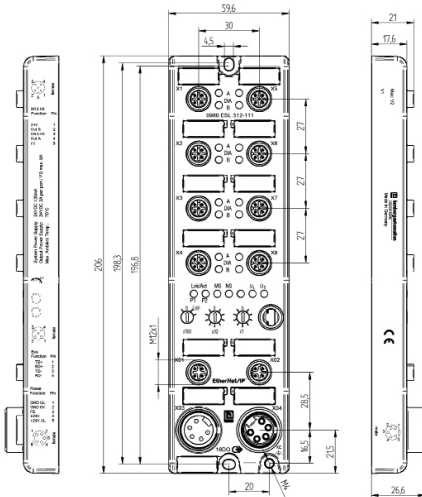



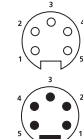

## LioN-Power Active I/O M12, 7/8" Power, EtherNet/IP, 16DO



<b>Type</b>	0980 ESL 312-111
<b>Product Description</b>	LioN-P EtherNet/IP device, 16 digital output channels with galvanic isolation M12 LAN connection, 4-poles, D-coded, 7/8" power supply, 5-poles

Diagnostic indication		
LED	Indication	Condition
1...8 A	Yellow	Channel status
1...8 DIA A	Red	Peripheral fault
1...8 B	White	Channel status
1...8 DIA B	Red	Peripheral fault
P1 Lnk/Act	Green	Connection to an Ethernet subscriber
	Green blinking	I/O device is in data exchange
	Off	No connection to another subscriber
P2 Lnk/Act	Green	Connection to an Ethernet subscriber
	Yellow blinking	I/O device is in data exchange
	Off	No connection to another subscriber
MS (Module Status)	Green	Module is ready
	Green blinking	Incorrect Configuration
	Red-Green blinking	Self-test is carried out
	Red blinking	Firmware update
	Off	Device is switched off
NS (Network Status)	Green blinking	IP address present
	Green	Connection to master is present
	Red	At least one connection has timed out
	Red blinking	IP address is already used by another device
	Red-Green blinking	Self-test is carried out
	Off	Device is switched off
U <sub>s</sub>	Green	Voltage 19V ≤ U <sub>s</sub> ≤ 30V
	Red	U <sub>s</sub> Voltage < 19V or U <sub>s</sub> > 30V
U <sub>L</sub>	Green	Voltage 19V ≤ U <sub>L</sub> ≤ 30V
	Red	U <sub>L</sub> Voltage < 19V or U <sub>L</sub> > 30V

Bit assignment								
Bit	7	6	5	4	3	2	1	0
<b>Output Data: 16DO</b>								
<b>Byte 0</b>	4B	4A	3B	3A	2B	2A	1B	1A
<b>Byte 1</b>	8B	8A	7B	7A	6B	6A	5B	5A

Pin assignment		
<b>M12 I/O port, A-coded</b>  <ul style="list-style-type: none"> <li>1 = +24V</li> <li>2 = Out B</li> <li>3 = GND 0V</li> <li>4 = Out A</li> <li>5 = FE</li> </ul>	<b>Power supply 7/8"</b>  <ul style="list-style-type: none"> <li>1 = GND UL</li> <li>2 = GND 0V</li> <li>3 = FE</li> <li>4 = +24V</li> <li>5 = +24V UL</li> </ul>	<b>M12 EtherNet/IP, D-coded</b>  <ul style="list-style-type: none"> <li>1 = TD+</li> <li>2 = RD+</li> <li>3 = TD-</li> <li>4 = RD-</li> </ul>

<b>Part number</b>	<b>Order number</b>
0980 ESL 312-111	934880002

# Be Certain with Belden

## LioN-Power Active I/O M12, 7/8" Power, EtherNet/IP, 16DO

Technical Data	
Environmental Temperature	-20° C to +70° C (Operation)
Housing Material	Metal Zinc Die-cast
Contact Bearer	PA/TPU
Contact	M12 A, D-coded CuSn, Gold-plated 7/8" CuZn, Gold-plated
O-ring	FKM
Mechanical Data	
Weight	520 g
Protection Class (IEC 60529)	IP65, IP67 (only if mounted and locked in combination with Hirschmann/Lumberg connector)
Module Supply	
Rated Voltage	24V DC
Voltage Range	19 to 30V DC
Nominal Current	9 A
Connection Type	7/8" power connector, 5 poles
Number	2
Bus-System	
Network	EtherNet/IP
Transmission Rate	10/100 Mbit/s
Address Range	0 to 255
Connection Type	M12 LAN connection, 4 poles, D-coded
Number	2
Outputs	
Number of Digital Channels	16
Actoric Current	2 A per channel
Actoric Current (max.)	9 A
Short-circuit Proof	yes
Channel Type N.O.	p-switching
Status Indicator	LED white or yellow per channel
Diagnostic Indicator	LED red per port

The application of these products in harsh environments should always be checked before use.

Specifications subject to alteration.