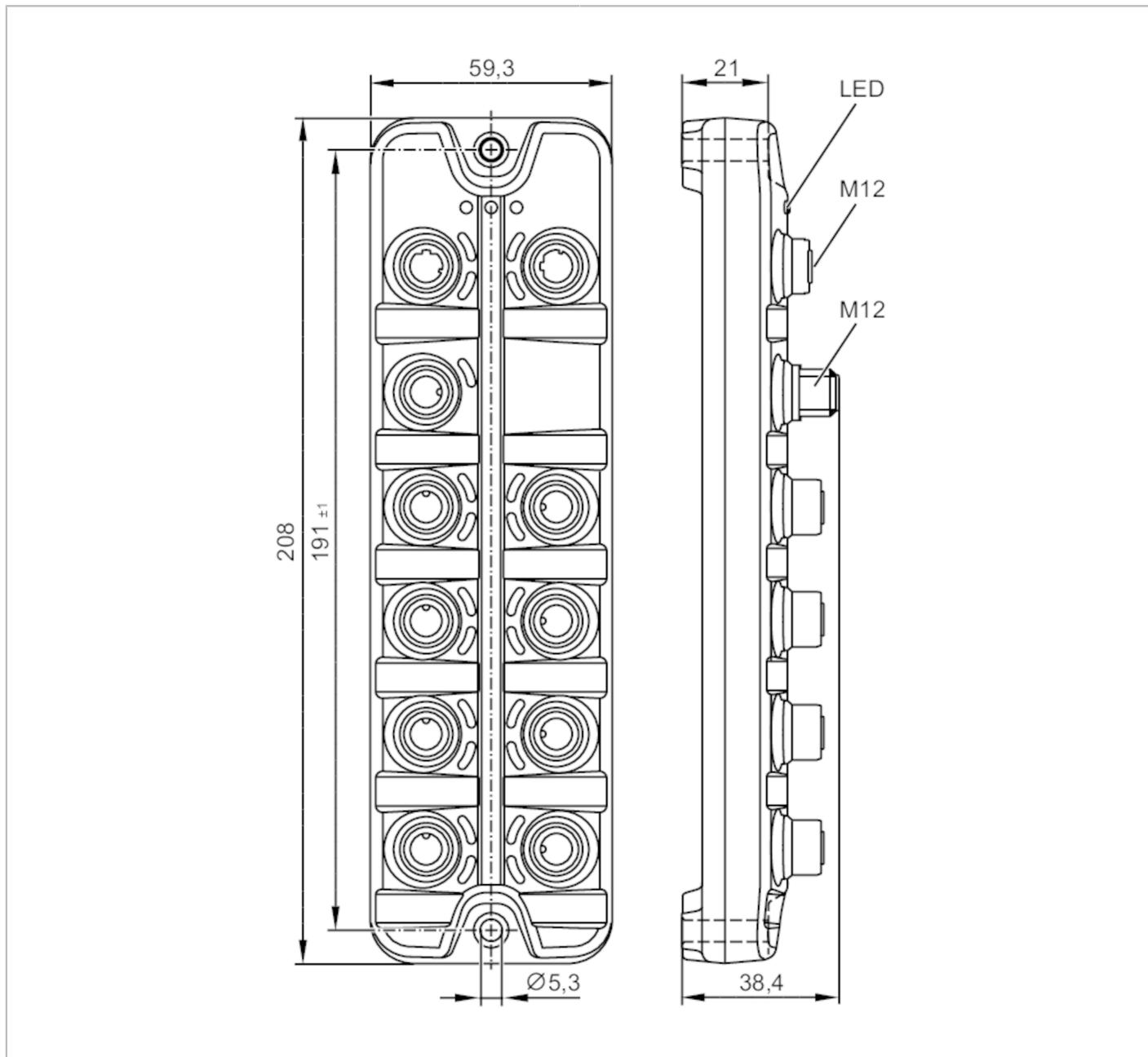


# AL4003



## Ethernet module with PROFINET interface

ETH Module SL PN 16DI IP69K



### Application

Application	hygienic systems; I/O modules for field applications
Daisy-chain function	fieldbus interface

### Electrical data

Operating voltage	[V]	20...28 DC; (US ; to SELV/PELV)
Current consumption	[mA]	200...3900; (cULus: 200 ... 3500; US)
Protection class		III
Max. current load total	[A]	3.6
Overall current rating (UL)	[A]	3.2

**Ethernet module with PROFINET interface**

ETH Module SL PN 16DI IP69K

<b>Inputs / outputs</b>		
Number of inputs and outputs		Number of digital inputs: 16
<b>Inputs</b>		
Number of digital inputs		16; (type 2 according to IEC 61131-2)
Switching level high	[M]	11...30
Switching level low	[M]	0...5
Digital inputs protected against short circuits		yes
<b>Software / programming</b>		
Parameter setting options		counter function
Functions and parameters	function	CTU (Up Counter), CTD (Down Counter), CTUD (Up-Down Counter), CTDIR (Direction Counter)
	number	8 (1 counter for each port)
	count frequency	4500 Hz
	main counter	32 Bit (0...4.294.967.295)
	batch counter	16 Bit (0...65.535)
<b>Interfaces</b>		
Communication interface		Ethernet
Ethernet - PROFINET		
Transmission standard		100Base-TX
Transmission rate		100 MBit/s
Protocol		PROFINET
Factory settings		IP address: 0.0.0.0 subnet mask: 0.0.0.0 gateway IP address: 0.0.0.0 MAC address: see type label
Note on interfaces		CC-C (Conformance Class C) (IRT-Switch) S2 redundancy Netload Class III CiR (Configuration in Run) SNMP (Simple Network Management Protocol) MRP (Media Redundancy Protocol) Supported network topologies: line ring
<b>Operating conditions</b>		
Ambient temperature	[°C]	-25...60
Storage temperature	[°C]	-25...85
Max. relative air humidity	[%]	90
Protection		IP 65; IP 66; IP 67; IP 69K; (operation with stainless steel protective caps: IP 69K)
Protection rating (NEMA 250)		6P
Pollution degree		2
Chemical media	ISO 16750-5	HLP, CC, DB, DC, DD, CA
	NEMA 250 5.13.1	AA

# AL4003



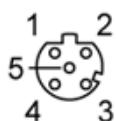
## Ethernet module with PROFINET interface

ETH Module SL PN 16DI IP69K

Tests / approvals		
EMC	EN 61000-6-2 EN 61000-6-4	
Shock resistance	DIN EN 60068-2-27	
Vibration resistance	DIN EN 60068-2-64 2009-04 DIN EN 60068-2-6 2008-10	
MTTF [years]		130
Mechanical data		
Weight [g]		420.6
Materials	housing: PA grey; socket: stainless steel (316L/1.4404)	
Sealing material	EPDM	
Accessories		
Items supplied	Protective cap: 1 x M12, stainless steel, E12542	
Remarks		
Remarks	For further information please see the operating instructions.	
Pack quantity	1 pcs.	

## Electrical connection - Ethernet

Connector: M12; coding: D; Sealing: EPDM

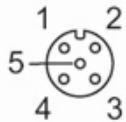


## IN / OUT X21, X22

- |   |          |
|---|----------|
| 1 | TX +     |
| 2 | RX +     |
| 3 | TX -     |
| 4 | RX -     |
| 5 | not used |

## Electrical connection - Process connection

Connector: M12; coding: A; Sealing: EPDM



## Digital Input X01...X08

- |   |                       |
|---|-----------------------|
| 1 | Sensor supply (US) L+ |
| 2 | digital input 2       |
| 3 | Sensor supply (US) L- |
| 4 | digital input 1       |
| 5 | functional earth      |

# AL4003



## Ethernet module with PROFINET interface

ETH Module SL PN 16DI IP69K

### Electrical connection - power supply

Connector: M12; coding: A



#### X31

1	+ 24 V DC (US)
2	not used
3	GND (US)
4	not used