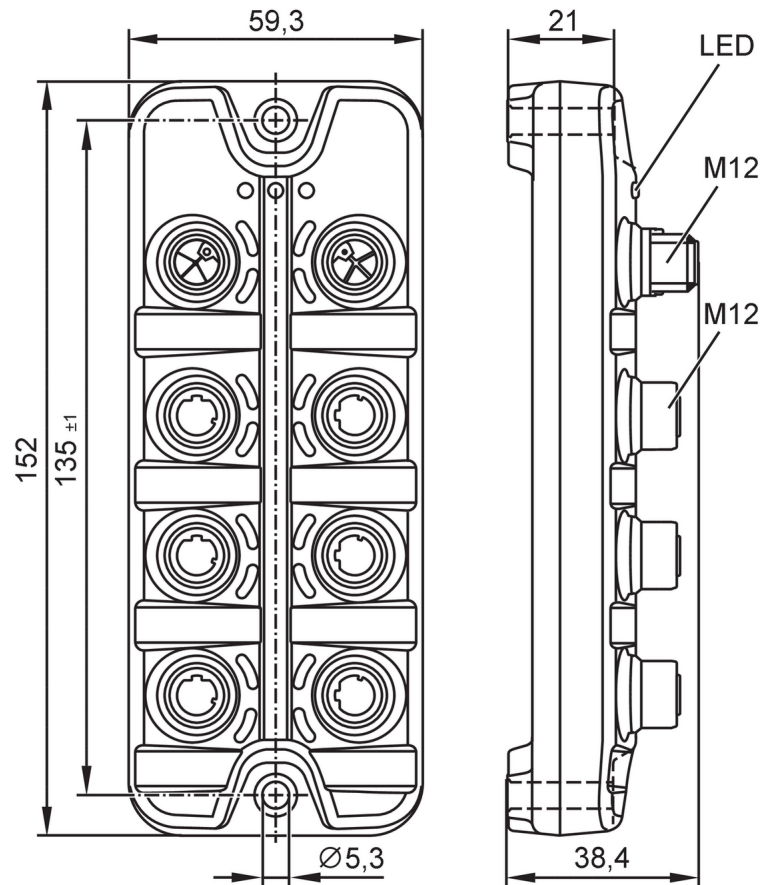


# AL3101



## PROFINET-Switch

ETH Switch PFL PN-A 6P IP69K



Depending on the version some LEDs are inactive



| Application                   |      |                                             |
|-------------------------------|------|---------------------------------------------|
| Design                        |      | unmanaged switch for field applications     |
| Application                   |      | for PROFINET networks                       |
| Daisy-chain function          |      | voltage supply                              |
| Electrical data               |      |                                             |
| Operating voltage             | [V]  | 8...32 DC; (US ; to PELV; cULus: 8...28 DC) |
| Nominal voltage DC            | [V]  | 12 / 24                                     |
| Current consumption           | [mA] | 100; (US; 24 V: 50 mA)                      |
| Protection class              |      | III                                         |
| Reverse polarity protection   |      | yes                                         |
| Interfaces                    |      |                                             |
| Communication interface       |      | Ethernet                                    |
| Number of Ethernet interfaces |      | 6                                           |
| Transmission standard         |      | 10Base-T; 100Base-TX                        |
| Transmission rate             |      | 10 MBit/s; 100 MBit/s                       |

# AL3101



## PROFINET-Switch

ETH Switch PFL PN-A 6P IP69K

|                    |                                                    |
|--------------------|----------------------------------------------------|
| Note on interfaces | PROFINET Conformance Class A (CC-A)                |
|                    | processing type: Store and Forward                 |
|                    | auto polarity                                      |
|                    | auto negotiation                                   |
|                    | auto MDI-X                                         |
|                    | QoS (Quality of Service): IEEE 802.1p, IEEE 802.1Q |
|                    | priority queues: 4                                 |
|                    | MAC table size: 2000 addresses                     |
|                    | blocking: LLDP, PTCP 01:80:C2:00:00:0E             |

| Operating conditions         |                                                                                       |                         |
|------------------------------|---------------------------------------------------------------------------------------|-------------------------|
| Ambient temperature          | [°C]                                                                                  | -25...70                |
| Storage temperature          | [°C]                                                                                  | -25...85                |
| Max. relative air humidity   | [%]                                                                                   | 90                      |
| Max. height above sea level  | [m]                                                                                   | 4000                    |
| 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                      |

| Tests / approvals        |                                                   |                                            |
|--------------------------|---------------------------------------------------|--------------------------------------------|
| EMC                      | UN/ECE-R10 Noise emission and noise interference: | 100 V/m                                    |
|                          | DIN EN 61000-6-2 ESD                              |                                            |
|                          | DIN EN 61000-6-4 Burst                            |                                            |
|                          | ISO 7637-2 pulse 1                                | severity level 4 / function state C (12 V) |
|                          | ISO 7637-2 pulse 2a                               | severity level 4 / function state A (12 V) |
|                          | ISO 7637-2 pulse 2b                               | severity level 4 / function state C (12 V) |
|                          | ISO 7637-2 pulse 3a                               | severity level 4 / function state A (12 V) |
|                          | ISO 7637-2 pulse 3b                               | severity level 4 / function state A (12 V) |
|                          | ISO 7637-2 pulse 4                                | severity level 4 / function state A (12 V) |
|                          | ISO 7637-2 pulse 5a                               | severity level 3 / function state A (12 V) |
|                          | ISO 7637-2 pulse 1                                | severity level 4 / function state C (24 V) |
|                          | ISO 7637-2 pulse 2a                               | severity level 4 / function state A (24 V) |
|                          | ISO 7637-2 pulse 2b                               | severity level 4 / function state C (24 V) |
|                          | ISO 7637-2 pulse 3a                               | severity level 4 / function state A (24 V) |
|                          | ISO 7637-2 pulse 3b                               | severity level 4 / function state A (24 V) |
|                          | ISO 7637-2 pulse 4                                | severity level 4 / function state A (24 V) |
| Shock resistance         | DIN EN 60068-2-27                                 |                                            |
| Fast temperature changes | EN 60068-2-30                                     |                                            |
|                          | EN 60068-2-78                                     |                                            |
|                          | EN 60068-2-52                                     |                                            |
| Vibration resistance     | DIN EN 60068-2-64                                 |                                            |
|                          | DIN EN 60068-2-6                                  |                                            |
|                          | EN 60068-2-27                                     |                                            |
| MTTF                     | [years]                                           | 232                                        |

| Mechanical data |             |        |
|-----------------|-------------|--------|
| Weight          | [g]         | 319.55 |
| Housing         | rectangular |        |

# AL3101



## PROFINET-Switch

ETH Switch PFL PN-A 6P IP69K

|                  |                                                           |
|------------------|-----------------------------------------------------------|
| Type of mounting | Backplane mounting                                        |
| Dimensions [mm]  | 152 x 59.3 x 38.4                                         |
| Material         | housing: PA grey; Socket: stainless steel (1.4404 / 316L) |
| Sealing material | EPDM                                                      |

### Accessories

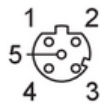
|                |                                                  |
|----------------|--------------------------------------------------|
| Items supplied | Protective cap: 1 x M12, stainless steel, E12542 |
|----------------|--------------------------------------------------|

### Remarks

|               |                                                 |
|---------------|-------------------------------------------------|
| Remarks       | Further information is available in the manual. |
| Pack quantity | 1 pcs.                                          |

### Electrical connection - Ethernet

Connector: 6 x M12; coding: D; Contacts: 4; sealing: EPDM



#### X1...X6

|   |      |
|---|------|
| 1 | TX + |
| 2 | RX + |
| 3 | TX - |
| 4 | RX - |
| 5 | n.c. |

### Electrical connection - voltage supply IN

Connector: 1 x M12; coding: L; Contacts: 5



#### XD1

|   |                |
|---|----------------|
| 1 | + 24 V DC (US) |
| 2 | GND (UA)       |
| 3 | GND (US)       |
| 4 | + 24 V DC (UA) |
| 5 | FE             |

### Electrical connection - voltage supply OUT

Connector: 1 x M12; coding: L; Contacts: 5; sealing: EPDM



#### XD2

|   |                |
|---|----------------|
| 1 | + 24 V DC (US) |
| 2 | GND (UA)       |
| 3 | GND (US)       |
| 4 | + 24 V DC (UA) |
| 5 | FE             |