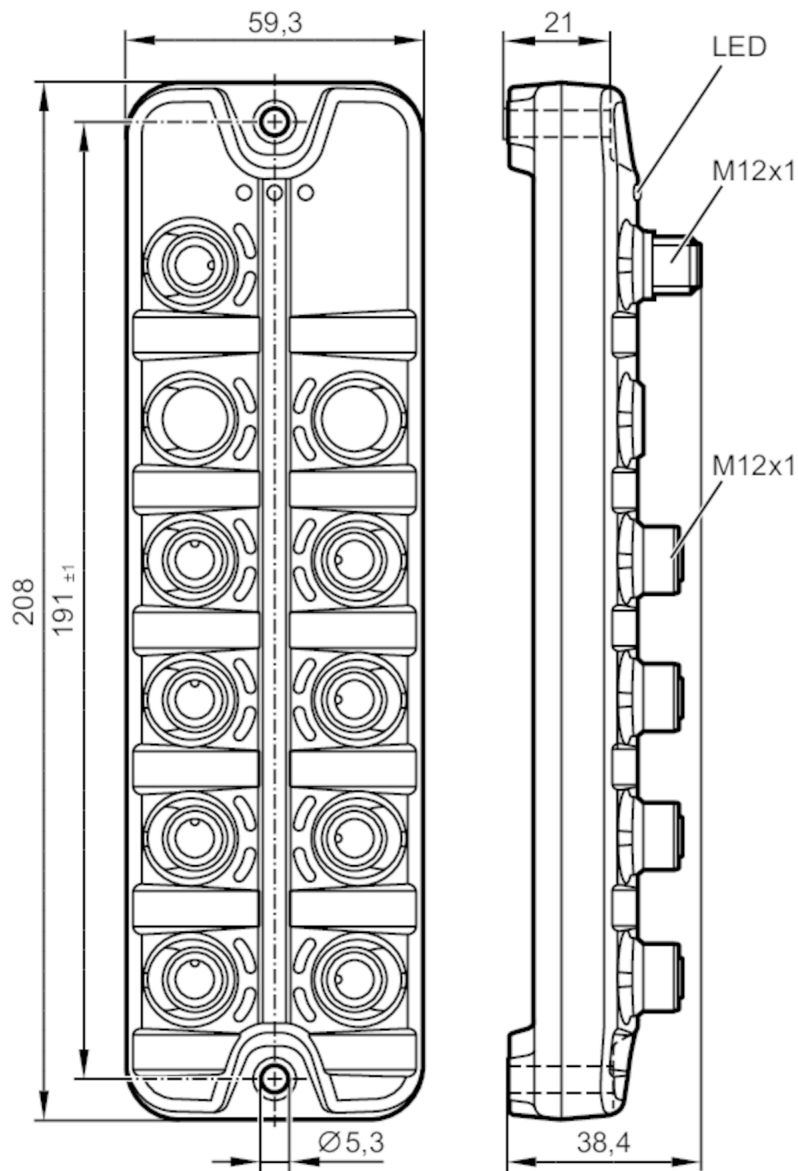


# AL2221



## IO-Link input/output module

IOL MOD SL 8XDX/DX A M12 IP69K



Depending on the version some LEDs are inactive



| Electrical data                    |      |                                                             |
|------------------------------------|------|-------------------------------------------------------------|
| Operating voltage                  | [V]  | 18...30 DC                                                  |
| Current consumption                | [mA] | 1100; (US)                                                  |
| Protection class                   |      | III                                                         |
| Inputs / outputs                   |      |                                                             |
| Total number of inputs and outputs |      | 16                                                          |
| Number of inputs and outputs       |      | Number of digital inputs: 16; Number of digital outputs: 16 |
| Inputs                             |      |                                                             |
| Number of digital inputs           |      | 16; (configurable)                                          |



## IO-Link input/output module

IOL MOD SL 8XDX/DX A M12 IP69K

|                                 |                             |
|---------------------------------|-----------------------------|
| Input circuit of digital inputs | PNP; (type 3 (IEC 61131-2)) |
| Sensor supply of the inputs     | US                          |
| Power supply [V]                | 18...30                     |
| Input current High [mA]         | 2...15                      |
| Input current Low [mA]          | 0...1.5                     |
| Switching level high [V]        | 11...28                     |
| Switching level low [V]         | 0...5                       |

## Outputs

|                                     |                    |
|-------------------------------------|--------------------|
| Number of digital outputs           | 16; (configurable) |
| Max. current load per output [mA]   | 1000               |
| Max. current load outputs total [A] | 1                  |
| Short-circuit protection            | yes                |
| Actuator supply outputs             | US                 |

## Interfaces

| Communication interface      | IO-Link                                                                                                        |                   |          |         |      |
|------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|------|
| SDCI standard                | IEC 61131-9                                                                                                    |                   |          |         |      |
| Transmission type            | COM3 (230,4 kBaud)                                                                                             |                   |          |         |      |
| IO-Link revision             | 1.1                                                                                                            |                   |          |         |      |
| SIO mode                     | no                                                                                                             |                   |          |         |      |
| Required master port type    | A                                                                                                              |                   |          |         |      |
| Min. process cycle time [ms] | 4                                                                                                              |                   |          |         |      |
| Supported DeviceIDs          | <table> <tr> <th>Type of operation</th><th>DeviceID</th></tr> <tr> <td>default</td><td>1314</td></tr> </table> | Type of operation | DeviceID | default | 1314 |
| Type of operation            | DeviceID                                                                                                       |                   |          |         |      |
| default                      | 1314                                                                                                           |                   |          |         |      |
| Note                         | For further information please see the IODD PDF file under "Downloads"                                         |                   |          |         |      |

## Operating conditions

|                                 |                                                                                                                               |             |                         |                 |    |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------|-----------------|----|
| Ambient temperature [°C]        | -25...60                                                                                                                      |             |                         |                 |    |
| Storage temperature [°C]        | -25...70                                                                                                                      |             |                         |                 |    |
| Max. relative air humidity [%]  | 90                                                                                                                            |             |                         |                 |    |
| Max. height above sea level [m] | 2000                                                                                                                          |             |                         |                 |    |
| Protection                      | IP 65; IP 67; IP 69K; (operation with stainless steel protective caps: IP 69K)                                                |             |                         |                 |    |
| Protection rating (NEMA 250)    | 6P                                                                                                                            |             |                         |                 |    |
| Pollution degree                | 2                                                                                                                             |             |                         |                 |    |
| Chemical media                  | <table> <tr> <td>ISO 16750-5</td><td>HLP, CC, DB, DC, DD, CA</td></tr> <tr> <td>NEMA 250 5.13.1</td><td>AA</td></tr> </table> | ISO 16750-5 | HLP, CC, DB, DC, DD, CA | NEMA 250 5.13.1 | AA |
| ISO 16750-5                     | HLP, CC, DB, DC, DD, CA                                                                                                       |             |                         |                 |    |
| NEMA 250 5.13.1                 | AA                                                                                                                            |             |                         |                 |    |

## Tests / approvals

|                      |                                                                                                                                            |                   |  |                  |  |             |  |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--|------------------|--|-------------|--|
| EMC                  | <table> <tr> <td>EN 61000-6-2</td><td></td></tr> <tr> <td>EN 61000-6-3</td><td></td></tr> <tr> <td>IEC 61131-9</td><td></td></tr> </table> | EN 61000-6-2      |  | EN 61000-6-3     |  | IEC 61131-9 |  |
| EN 61000-6-2         |                                                                                                                                            |                   |  |                  |  |             |  |
| EN 61000-6-3         |                                                                                                                                            |                   |  |                  |  |             |  |
| IEC 61131-9          |                                                                                                                                            |                   |  |                  |  |             |  |
| Shock resistance     | DIN EN 60068-2-27                                                                                                                          |                   |  |                  |  |             |  |
| Vibration resistance | <table> <tr> <td>DIN EN 60068-2-64</td><td></td></tr> <tr> <td>DIN EN 60068-2-6</td><td></td></tr> </table>                                | DIN EN 60068-2-64 |  | DIN EN 60068-2-6 |  |             |  |
| DIN EN 60068-2-64    |                                                                                                                                            |                   |  |                  |  |             |  |
| DIN EN 60068-2-6     |                                                                                                                                            |                   |  |                  |  |             |  |
| MTTF [years]         | 46                                                                                                                                         |                   |  |                  |  |             |  |

## Mechanical data

|            |         |
|------------|---------|
| Weight [g] | 454.235 |
|------------|---------|

# AL2221



## IO-Link input/output module

IOL MOD SL 8XDX/DX A M12 IP69K

|                  |                                                         |                 |
|------------------|---------------------------------------------------------|-----------------|
| Dimensions       | [mm]                                                    | 26 x 59.3 x 208 |
| Materials        | housing: PA grey; socket: stainless steel (316L/1.4404) |                 |
| Sealing material | EPDM                                                    |                 |

### Displays / operating elements

|         |           |                 |
|---------|-----------|-----------------|
| Display | operation | 1 x LED, green  |
|         | fault     | 1 x LED, red    |
|         | function  | 1 x LED, yellow |

### Accessories

|                        |                                |
|------------------------|--------------------------------|
| Accessories (optional) | protective cap for M12 sockets |
|------------------------|--------------------------------|

### Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection - IO-Link

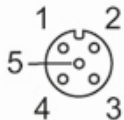
Connector: 1 x M12; coding: A



| X1 |                |
|----|----------------|
| 1  | + 24 V DC (US) |
| 2  | not used       |
| 3  | GND (US)       |
| 4  | IO-Link        |

### Electrical connection - inputs / outputs

Connector: 8 x M12; coding: A; Sealing: EPDM



| X1.0...X1.7 |                |
|-------------|----------------|
| 1           | + 24 V DC (US) |
| 2           | I/O2           |
| 3           | GND (US)       |
| 4           | I/O1           |
| 5           | not used       |