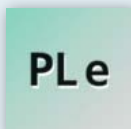# Safety over IO-Link

**PROFIsafe IO-Link module**

- **Safety module for IO-Link**
- **8 safe OSSD inputs**
- **4 powerful outputs with separate 24 V supply**
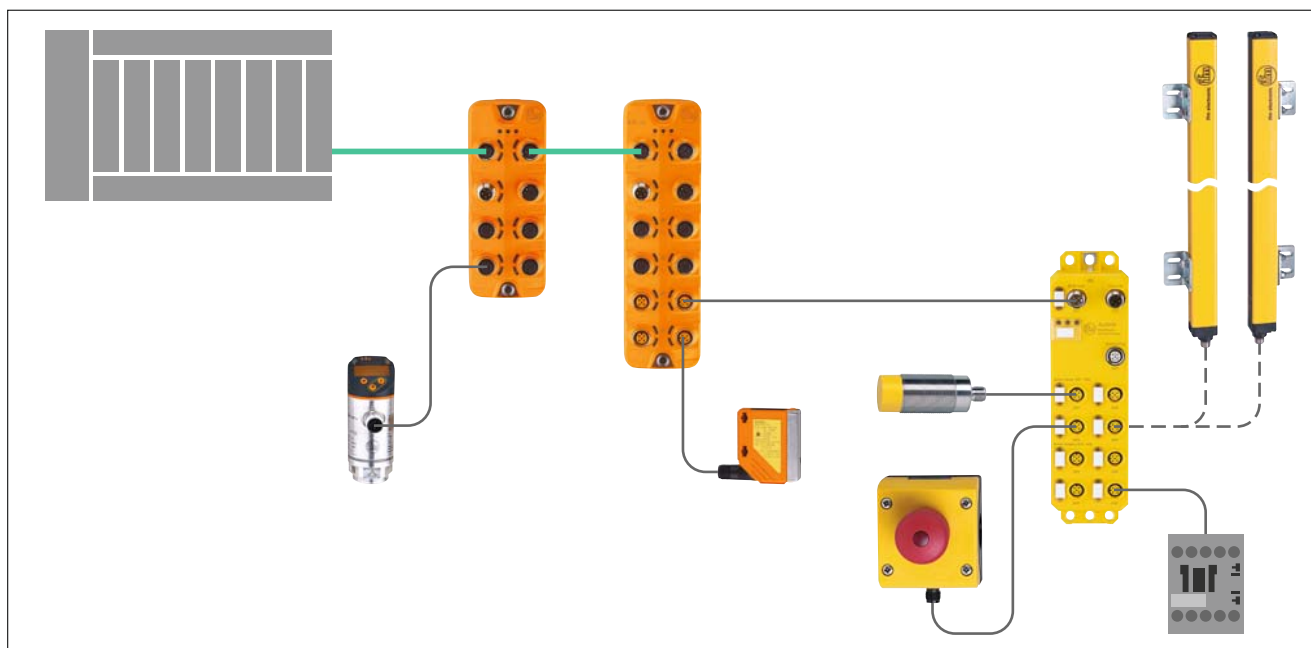- **PROFIsafe telegram tunnelled via IO-Link**
- **Safety to SIL 3 and PLe**

**IO-Link for safety-related applications**

Thanks to the transmission protocol "PROFIsafe", standard safety sensors and actuators can be operated via IO-Link.

All you need is the PROFIsafe IO-Link module. It features 8 safe digital inputs (OSSD) and 4 safe outputs. The innovation: On the hardware side, the module is simply connected to a normal IO-Link master via IO-Link. The special PROFIsafe transmission telegram ensures a "tunneled" connection with the safety controller within the normal IO-Link communication. It fulfils the safety levels SIL 3 to IEC 61508 / EN 61508 and PLe to EN ISO 13849-1.
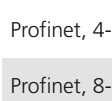
**Powerful safe outputs**

A separate 24 V supply via L-coded M12 sockets enables connection of powerful actuators. The outputs can be configured as PNP or NPN.

## Accessories

| Type | Description | Order no. |
|------|-------------|-----------|
| **IO-Link master PerformanceLine Coolant** | | |
| | Profinet, 4-port | **AL1400** |
| | Profinet, 8-port | **AL1402** |
| **Accessories for AL200S** | | |
| | PROFIsafe address plug | **E7700S** |

| M12 socket, connection cable 2.5 mm² , L-coded (power) | M12 - open | M12 - M12 |
|------|------|------|
| 1 m | – | **E12653** |
| 2 m | E12641 | E12654 |
| 5 m | E12642 | E12655 |
| 10 m | E12643 | E12656 |

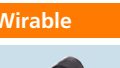| M12 connection cable 0.34 mm² (sensor) | | |
|------|------|------|
| 1 m | – | **EVC042** |
| 2 m | – | **EVC043** |
| 5 m | – | **EVC044** |
| 10 m | – | **EVC493** |

| Wirable | | |
|------|------|------|
| M12 connector L-coded (power) | – | **E12673** |
| M12 socket L-coded (power) | – | **E12672** |

On the hardware side, the PROFIsafe IO-Link module is connected to an A or B port of an AL1400 or AL1402 IO-Link master.
The safety module is powered via a separate L-coded M12 cable.
The "PROFIsafe" transmission protocol ensures tunnelled safety communication with the safety controller.

### Easy replacement of units through address plug

The PROFIsafe address plug E7700S enables simple and fast replacement of the AL200S without a computer and without additional software. This memory plug is simply plugged into the new AL200S and the stored PROFIsafe address is automatically transferred to the new PROFIsafe IO-Link module.

| Technical data PROFIsafe IO-Link module | | Order no. AL200S |
|------|------|------|
| Operating voltage | [V DC] | 19.2...30.2; (US; to SELV/PELV) |
| Additional voltage supply | [V DC] | 19.2...30.2; (UA) |
| Actuator supply UA Total current rating Current rating per port | [A] [A] | 6 2 |
| IO-Link version | | 1.1 |
| IO-Link transmission type | | COM3 |
| Number of inputs / outputs | | 8 / 4 |
| Safety classification 1-channel (ISO 13849-1) 1-channel (IEC 61508) 2-channel (ISO 13849-1) 2-channel (IEC 61508) | | PL d SIL 2 PL e SIL 3 |
| Protection rating | | IP 65, IP 67 |
| Ambient temperature | [°C] | -25...60 |

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