# OPL200

### Photoelectric angle sensor

OPL-FCKG/IO-LINK/AS



1    potentiometer sensitivity
2    output function switch

| Product characteristics | |
|---|---|
| Type of light | red light |
| **Electrical data** | |
| Operating voltage [V] | 10...30 DC; ("supply class 2" to cULus) |
| Current consumption [mA] | < 30 |
| Protection class | III |
| Reverse polarity protection | yes |
| Type of light | red light |
| Wave length [nm] | 660 |
| **Outputs** | |
| Electrical design | PNP |
| Output function | light-on/dark-on mode; (selectable) |
| Max. voltage drop switching output DC [V] | 1 |
| Permanent current rating of switching output DC [mA] | 100 |
| Switching frequency DC [Hz] | 5000 |
| Short-circuit protection | yes |
| Type of short-circuit protection | pulsed |
| Overload protection | yes |
| **Detection zone** | |
| Diameter of the smallest detectable object [mm] | 0.3 |

# OPL200

### Photoelectric angle sensor

OPL-FCKG/IO-LINK/AS

| Interfaces | | |
|---|---|---|
| Communication interface | IO-Link | |
| Transmission type | COM2 (38,4 kBaud) | |
| IO-Link revision | 1.1 | |
| SDCI standard | IEC 61131-9 | |
| Profiles | Smart Sensor - SSP 0 | Generic Profiled Sensor |
| | Function | Device identification |
| | Function | Multiple switching signal |
| | Function | Process data variable |
| | Function | Device diagnosis |
| | Function | Teach channel |
| SIO mode | yes | |
| Required master port type | A | |
| Min. process cycle time       [ms] | 3.2 | |
| Supported DeviceIDs | **Type of operation** | **DeviceID** |
| | default | 978 |

| Operating conditions | |
|---|---|
| Ambient temperature            [°C] | -25...60 |
| Protection | IP 67 |

| Tests / approvals | | |
|---|---|---|
| EMC | EN 60947-5-2 | |
| MTTF                                [years] | 709 | |

| Mechanical data | |
|---|---|
| Weight                               [g] | 114.5 |
| Dimensions                      [mm] | 75 x 10 x 75 |
| Side length X                    [mm] | 50 |
| Side length Y                    [mm] | 50 |
| Sensor width Z                  [mm] | 60 |
| Materials | housing: diecast zinc black anodised; lens: glass |

| Displays / operating elements | | |
|---|---|---|
| Display | switching status | 1 x LED, yellow |

| Remarks | |
|---|---|
| Remarks | operating voltage "supply class 2" according to cULus |
| Pack quantity | 1 pcs. |

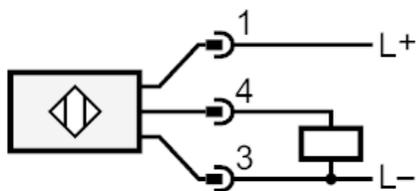| Electrical connection |
|---|

Connector: 1 x M8; coding: A

# OPL200

## Photoelectric angle sensor

OPL-FCKG/IO-LINK/AS

| Connection |
| --- |



4:         OUT / IO-Link

| Other data |
| --- |

**operating mode adjustable via IO-Link**

|  | standard | High Resolution | Power | Speed |
| --- | --- | --- | --- | --- |
| Resolution | 0.3 mm | 0.2 mm | 1.0 mm | 0.3 mm |
| Repeatability | 0.02 mm | 0.02 mm | 0.02 mm | 0.02 mm |
| Switching frequency | 5000 Hz | 1500 Hz | 250 Hz | 8000 Hz |
| Repeatability | 3 σ | | | |