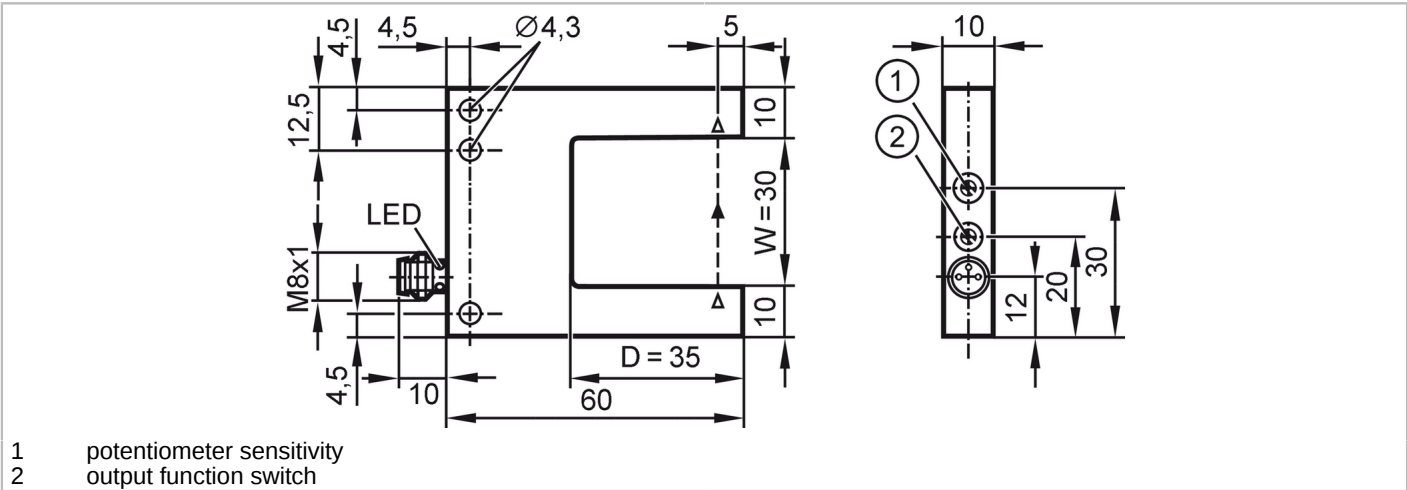


# OPU208



## Photoelectric fork sensor

OPU-FNKG/IO-LINK/AS



| Product characteristics                              |                                               |
|------------------------------------------------------|-----------------------------------------------|
| Type of light                                        | red light                                     |
| Electrical data                                      |                                               |
| Operating voltage [V]                                | 10...30 DC; (cULus - Class 2 source required) |
| Current consumption [mA]                             | < 30                                          |
| Protection class                                     | III                                           |
| Reverse polarity protection                          | yes                                           |
| Type of light                                        | red light                                     |
| Wave length [nm]                                     | 660                                           |
| Outputs                                              |                                               |
| Electrical design                                    | NPN                                           |
| 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                     | yes (non-latching)                            |
| Overload protection                                  | yes                                           |
| Monitoring range                                     |                                               |
| Diameter of the smallest detectable object [mm]      | 0.3                                           |
| Interfaces                                           |                                               |
| Communication interface                              | IO-Link                                       |
| Transmission type                                    | COM2 (38,4 kBaud)                             |
| IO-Link revision                                     | 1.1                                           |
| SDCI standard                                        | IEC 61131-9                                   |



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|                            |                      |     |                           |  |
|----------------------------|----------------------|-----|---------------------------|--|
| 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 class | A                    |     |                           |  |
| Min. process cycle time    | [ms]                 | 3.2 |                           |  |
| Supported DeviceIDs        | Type of operation    |     | DeviceID                  |  |
|                            | default              |     | 1103                      |  |

### Operating conditions

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

### Tests / approvals

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

### Mechanical data

|                   |                                                   |  |  |  |
|-------------------|---------------------------------------------------|--|--|--|
| Weight [g]        | 93                                                |  |  |  |
| Dimensions [mm]   | 50 x 10 x 60                                      |  |  |  |
| Fork depth D [mm] | 35                                                |  |  |  |
| Fork width W [mm] | 30                                                |  |  |  |
| Material          | housing: diecast zinc black anodized; lens: glass |  |  |  |

### Displays / operating elements

|         |                  |                 |  |  |
|---------|------------------|-----------------|--|--|
| Display | Switching status | 1 x LED, yellow |  |  |
|---------|------------------|-----------------|--|--|

### Remarks

|               |                                 |  |  |  |
|---------------|---------------------------------|--|--|--|
| Remarks       | cULus - Class 2 source required |  |  |  |
| Pack quantity | 1 pcs.                          |  |  |  |

### Electrical connection

Connector: 1 x M8; coding: A; Contacts: 3

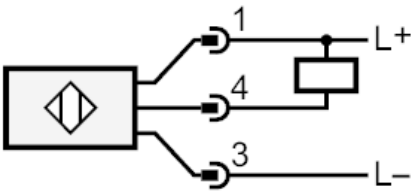




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Connection



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 $\sigma$ |                 |         |         |