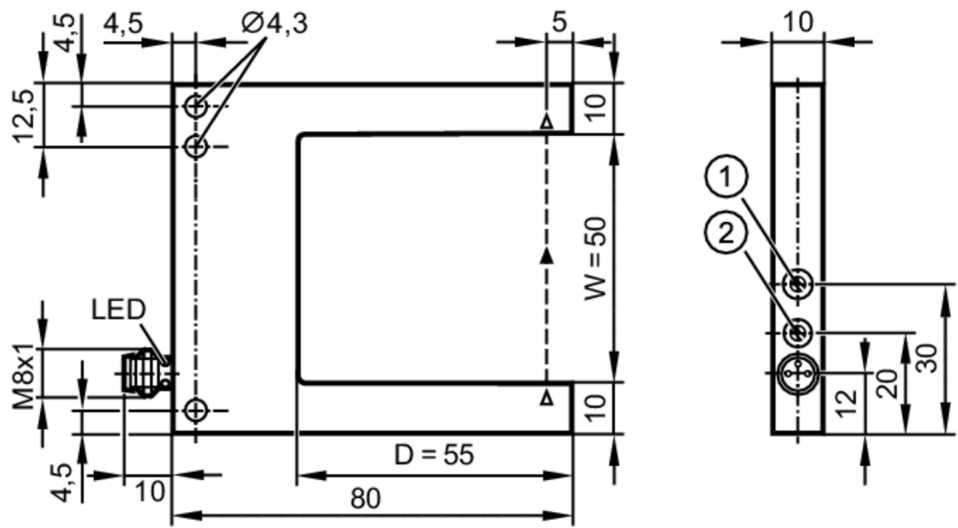




Photoelectric fork sensor

OPU-FNKG/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; (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                                       |



## Photoelectric fork sensor

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|                              |                          |                           |
|------------------------------|--------------------------|---------------------------|
| 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 class   | A                        |                           |
| Min. process cycle time [ms] | 3.2                      |                           |
| Supported DeviceIDs          | <b>Type of operation</b> | <b>DeviceID</b>           |
|                              | 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]        | 122.5                                             |  |
| Dimensions [mm]   | 70 x 10 x 80                                      |  |
| Fork depth D [mm] | 55                                                |  |
| Fork width W [mm] | 50                                                |  |
| 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

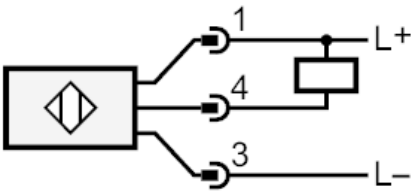




Photoelectric fork sensor

OPU-FNKG/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 $\sigma$ |                 |         |         |