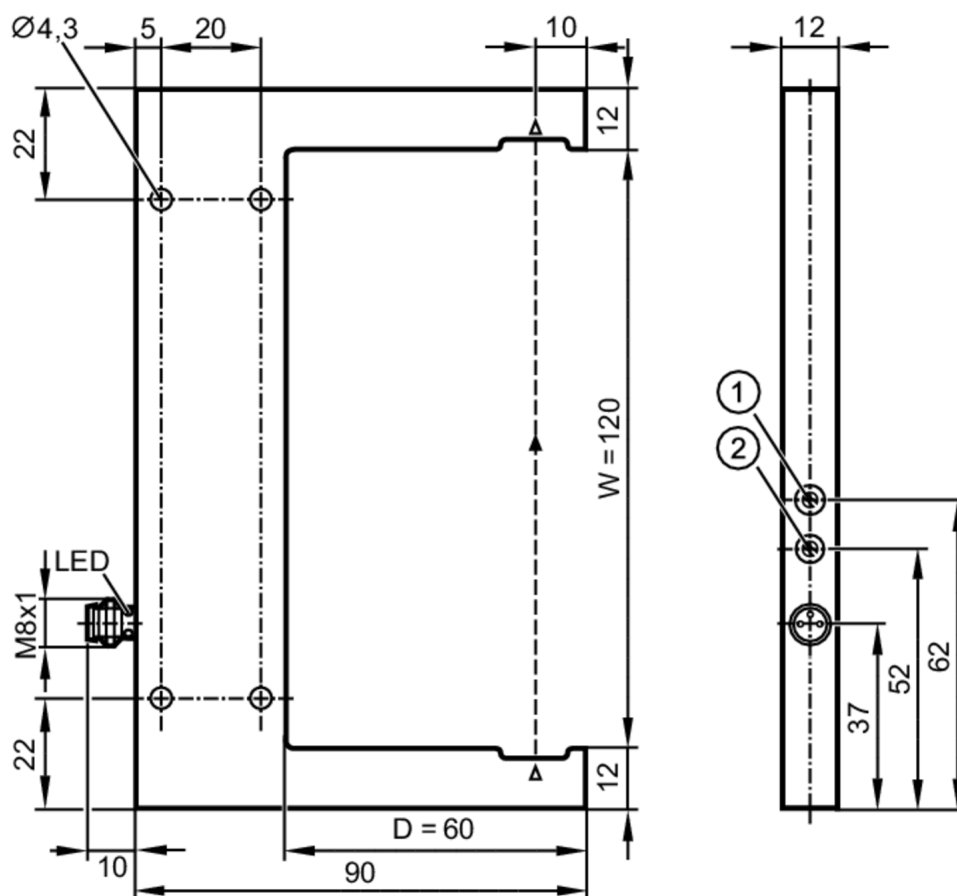




- 1 potentiometer sensitivity  
2 output function switch



## Product characteristics

|               |           |
|---------------|-----------|
| Type of light | red light |
|---------------|-----------|

## Electrical data

|                             |      |                                               |
|-----------------------------|------|-----------------------------------------------|
| Operating voltage           | [V]  | 10...35 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                                |



## Photoelectric fork sensor

OPU-FNKG/IO-LINK/AS

|                                            |  |                                                   |                 |
|--------------------------------------------|--|---------------------------------------------------|-----------------|
| Short-circuit protection                   |  | yes                                               |                 |
| Type of short-circuit protection           |  | yes (non-latching)                                |                 |
| Overload protection                        |  | yes                                               |                 |
| Monitoring range                           |  |                                                   |                 |
| Diameter of the smallest detectable object |  | [mm]                                              | 0.5             |
| 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 class                 |  | A                                                 |                 |
| Min. process cycle time                    |  | [ms]                                              | 3.2             |
| Supported DeviceIDs                        |  | Type of operation                                 |                 |
|                                            |  | DeviceID                                          |                 |
|                                            |  | default                                           |                 |
|                                            |  | 1105                                              |                 |
| Operating conditions                       |  |                                                   |                 |
| Ambient temperature                        |  | [°C]                                              | -25...60        |
| Protection                                 |  | IP 67                                             |                 |
| Tests / approvals                          |  |                                                   |                 |
| EMC                                        |  | EN 60947-5-2                                      |                 |
| MTTF                                       |  | [years]                                           | 709             |
| Mechanical data                            |  |                                                   |                 |
| Weight                                     |  | [g]                                               | 297             |
| Dimensions                                 |  | [mm]                                              | 144 x 12 x 90   |
| Fork depth D                               |  | [mm]                                              | 60              |
| Fork width W                               |  | [mm]                                              | 120             |
| 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.                                            |                 |

OPU211

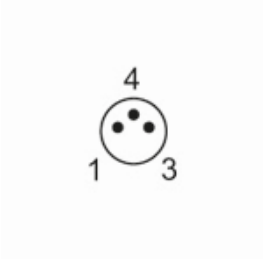


Photoelectric fork sensor

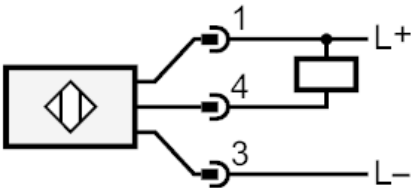
OPU-FNKG/IO-LINK/AS

Electrical connection

Connector: 1 x M8; coding: A



Connection



4 OUT / IO-Link

Other data

operating mode adjustable via IO-Link

|                     | standard | High Resolution | Power   | Speed   |
|---------------------|----------|-----------------|---------|---------|
| Resolution          | 0.05 mm  | 0.03 mm         | 1.5 mm  | 0.5 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      |                 |         |         |