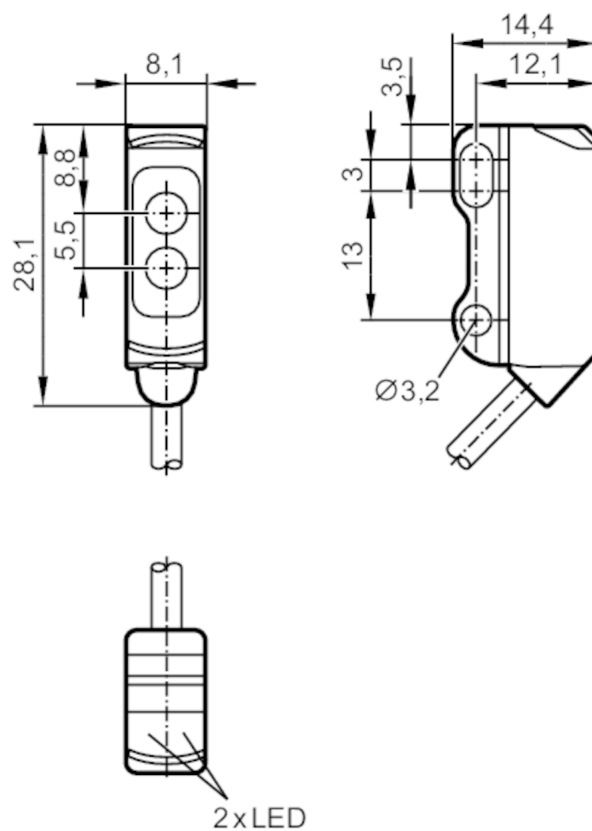


O8H208



Diffuse reflection sensor with background suppression

O8H-HPKG/IO-Link/0,30M/AS/3P



receiver in upper lens
transmitter in lower lens

CE EAC IO-Link

Application

Function principle Diffuse reflection sensor

Electrical data

| | |
|-----------------------------|--------------|
| Operating voltage [V] | 10...30 DC |
| Current consumption [mA] | 20; ((24 V)) |
| Protection class | III |
| Reverse polarity protection | yes |
| Type of light | red light |
| Wave length [nm] | 633 |



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| Outputs | |
|--|---|
| Output function | light-on mode |
| Max. voltage drop switching output DC [V] | 2.5 |
| Permanent current rating of switching output DC [mA] | 100 |
| Switching frequency DC [Hz] | 1000 |
| Electrical design | PNP |
| Short-circuit protection | yes |
| Type of short-circuit protection | pulsed |
| Range | |
| Range [mm] | 1...30; (white paper 200 x 200 mm) |
| Range on white object (90 % remission) [mm] | 1...30 |
| Range on grey object (18 % remission) [mm] | 5...30 |
| Range on black object (6 % remission) [mm] | 5...29 |
| Range adjustable | yes |
| Max. light spot diameter [mm] | 4 |
| Light spot dimensions refer to | at maximum range |
| Monitoring range final value [mm] | 10...80 |
| Background suppression available | yes |
| Interfaces | |
| Communication interface | IO-Link |
| Transmission type | COM2 (38.4 kBaud) |
| IO-Link revision | 1.1 |
| SDCI standard | IEC 61131-9 |
| IO-Link device ID | 535 d / 00 02 17 h |
| Profiles | Smart Sensor: Device Identification; Device Diagnosis; Teach Channel; Binary Data Channel |
| SIO mode | yes |
| Required master port type | A |
| Operating conditions | |
| Ambient temperature [°C] | -25...60 |
| Protection | IP 65; IP 67 |
| Tests / approvals | |
| EMC | EN 60947-5-2 |
| Mechanical data | |
| Weight [g] | 23 |
| Housing | rectangular |
| Dimensions [mm] | 28.1 x 8.1 x 14.4 |
| Materials | housing: ABS; stainless steel (1.4404 / 316L) |
| Lens material | PMMA |

O8H208



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Displays / operating elements

| | | |
|---------|------------------|-----------------|
| Display | switching status | 1 x LED, yellow |
| | operation | 1 x LED, green |

Remarks

| | |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

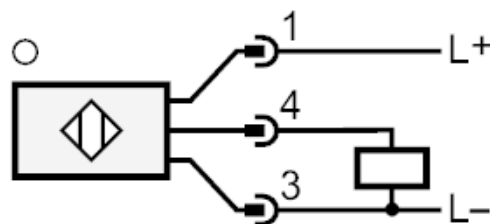
Electrical connection

Cable: 0.3 m, PVC; 3 x 0.08 mm²

Connector: 1 x M8



Connection

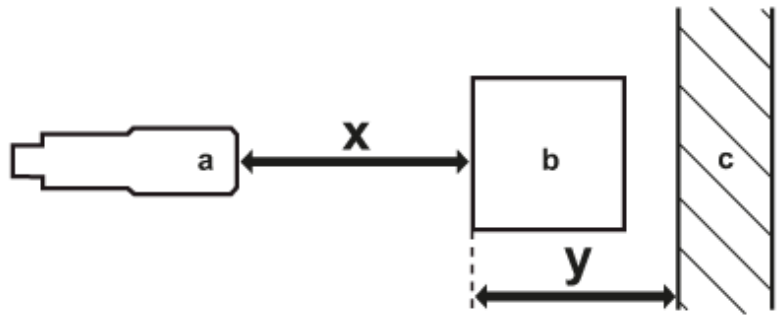




Diffuse reflection sensor with background suppression

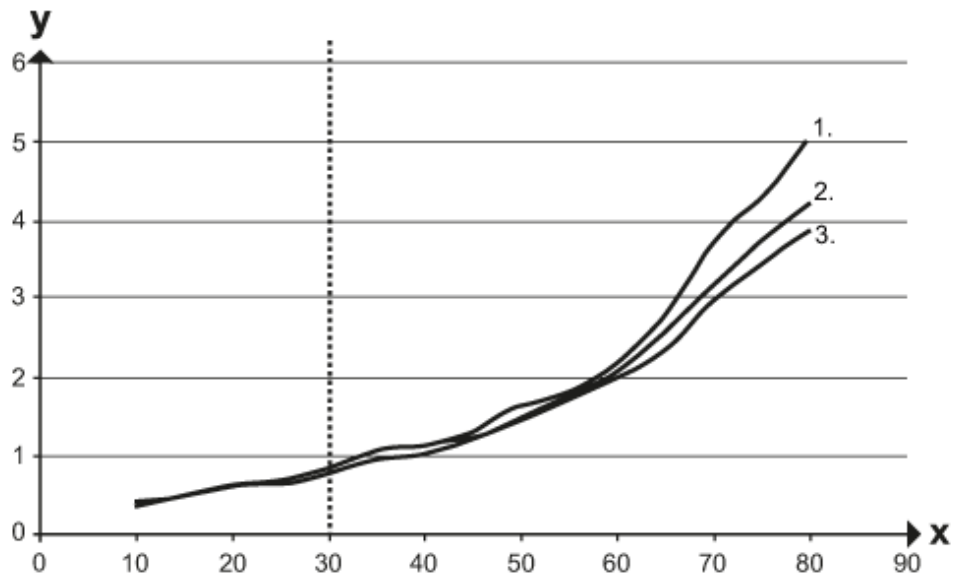
O8H-HPKG/IO-Link/0,30M/AS/3P

diagrams and graphs



- a: sensor
- b: object
- c: background
- x: distance sensor/object [mm]
- y: min. distance object/background [mm]

accuracy graph



- x: distance sensor/object [mm]
- y: min. distance object/background [mm]
- 1 = object black (6 % remission) , background (white 90 % remission)
- 2 = object grey (18 % remission) , background (white 90 % remission)
- 3 = object white (90 % remission) , background (white 90 % remission)