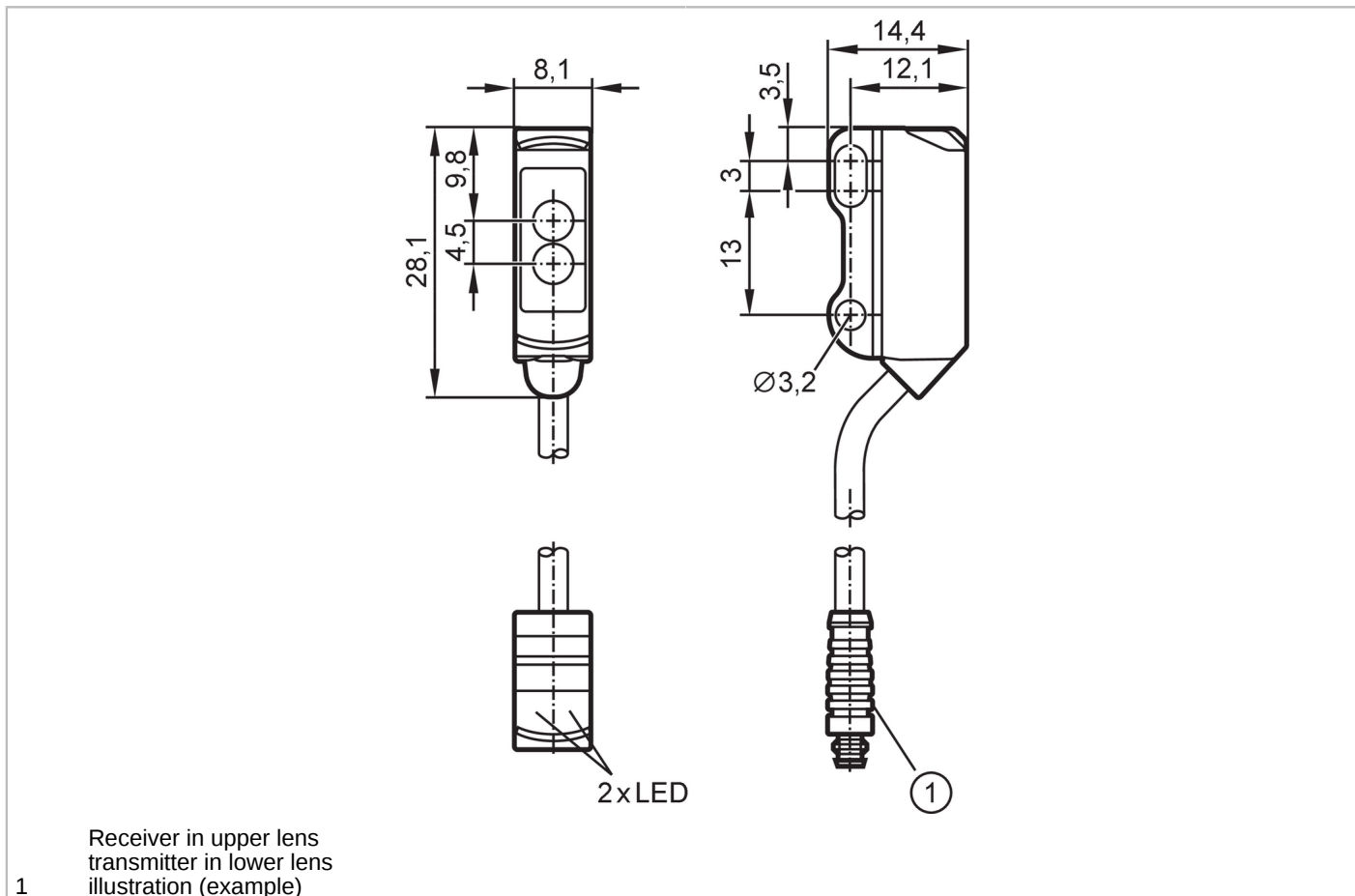


# O8P204



## Retro-reflective sensor

O8P-FPKG/IO-Link/0,30M/AS/4P



Product characteristics	
Type of light	red light
Housing	rectangular
Application	
Special feature	polarization filter
Function principle	Retro-reflective sensor
Application	For applications in robotics, assembly and handling technology
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
Outputs	
Electrical design	PNP
Output function	light-on/dark-on mode; (programmable)
Max. voltage drop switching output DC [V]	2.5

# O8P204



## Retro-reflective sensor

O8P-FPKG/IO-Link/0,30M/AS/4P

Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	1000
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)

### Monitoring range

Range referred to prismatic reflector [m]	0.02...1.8; (Prismatic reflector Ø 30 E20004)
Range adjustable	yes
Max. light spot diameter [mm]	120
Light spot dimensions refer to	at maximum range
Polarization filter available	yes

### 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	Device diagnosis
	Function	Teach channel
SIO mode	yes	
Required master port class	A	
Min. process cycle time [ms]	2.5	
IO-Link process data (cyclical)	<b>Function</b>	<b>bit length</b>
	process value	8
	device status	4
	binary switching information	1
IO-Link functions (acyclical)	application specific tag; operating hours counter; switching cycles counter	
Supported DeviceIDs	<b>Type of operation</b>	<b>DeviceID</b>
	default	786

### Operating conditions

Ambient temperature [°C]	-25...60
Protection	IP 65; IP 67

### Tests / approvals

EMC	EN 60947-5-2	
MTTF [years]	1067	
UL approval	Ta	-25...60 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	E017
	File number UL	E174191

### Mechanical data

Weight [g]	21.1
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# O8P204



## Retro-reflective sensor

O8P-FPKG/IO-Link/0,30M/AS/4P

Housing	rectangular
Dimensions [mm]	28.1 x 8.1 x 14.4
Material	housing: ABS; rear of the housing: stainless steel (1.4404 / 316L)
Lens material	front lens:PMMA
Lens alignment	Side sensing

### Displays / operating elements

Display	Switching status	1 x LED, yellow
	Power	1 x LED, green

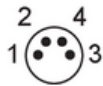
### Remarks

Pack quantity	1 pcs.
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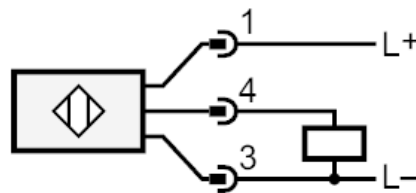
### Electrical connection

Cable: 0.3 m, PVC, black, Ø 2.9 mm; 3 x 0.08 mm<sup>2</sup>

Connector: 1 x M8; coding: A; Contacts: 4

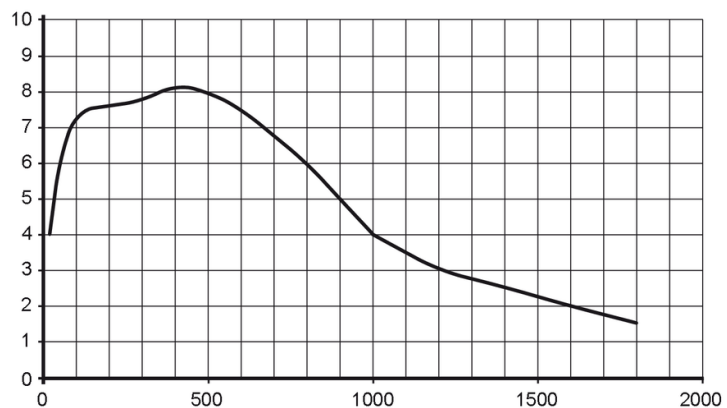


### Connection



### Diagrams and graphs

excess gain graph



x: distance [mm]  
y: excess gain factor