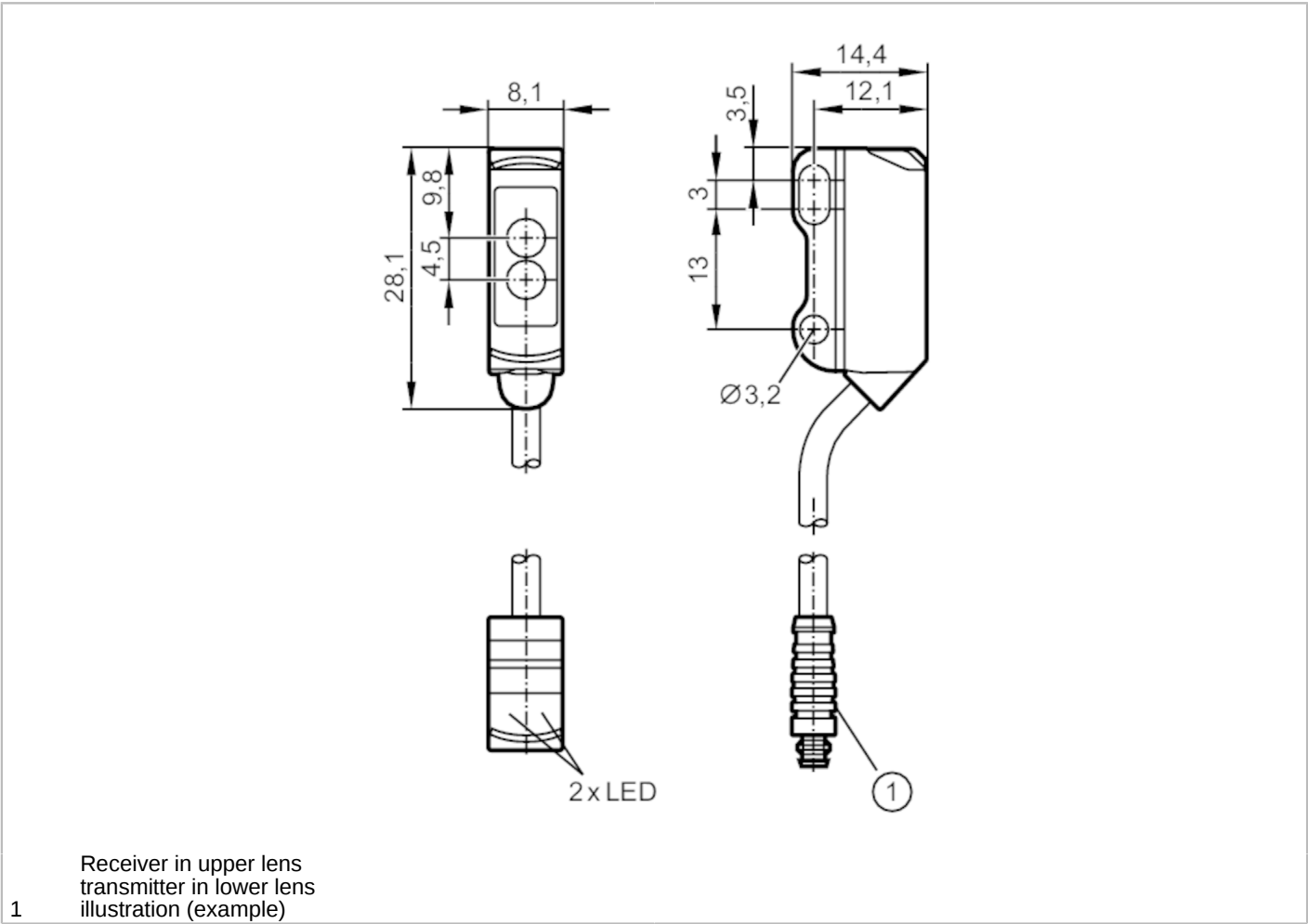




Retro-reflective sensor

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



1 Receiver in upper lens
transmitter in lower lens
illustration (example)



Product characteristics		
Type of light		red light
Housing		rectangular
Application		
System		polarization filter
Function principle		Retro-reflective 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
Outputs		
Electrical design		PNP
Output function		light-on/dark-on mode; (programmable)



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Max. voltage drop switching output DC	[V]	2.5
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: Device Identification; Device Diagnosis; Teach Channel; Switching Channel	
SIO mode	yes	
Required master port class	A	
Min. process cycle time	[ms]	2.5
IO-Link process data (cyclical)	Function	bit length
	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	Type of operation	DeviceID
	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
Housing		rectangular
Dimensions	[mm]	28.1 x 8.1 x 14.4

O8P204



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Material	housing: ABS; stainless steel (1.4404 / 316L)	
Lens material	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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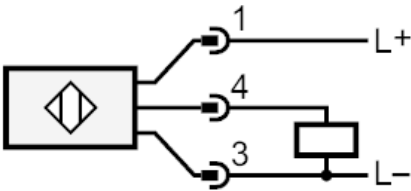
Electrical connection

Cable: 0.3 m, PVC, black, Ø 2.9 mm; 3 x 0.08 mm²

Connector: 1 x M8; coding: A



Connection



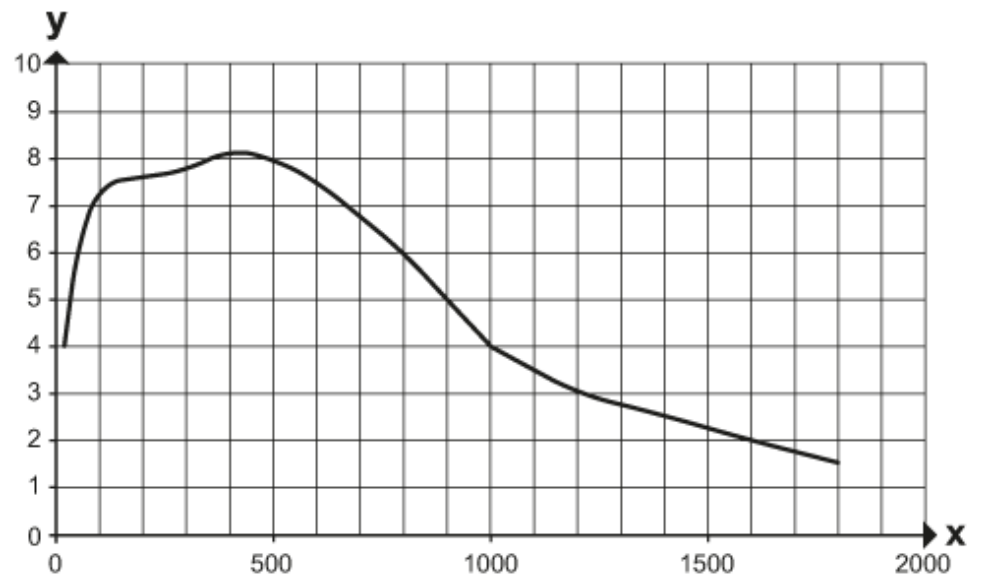


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Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor