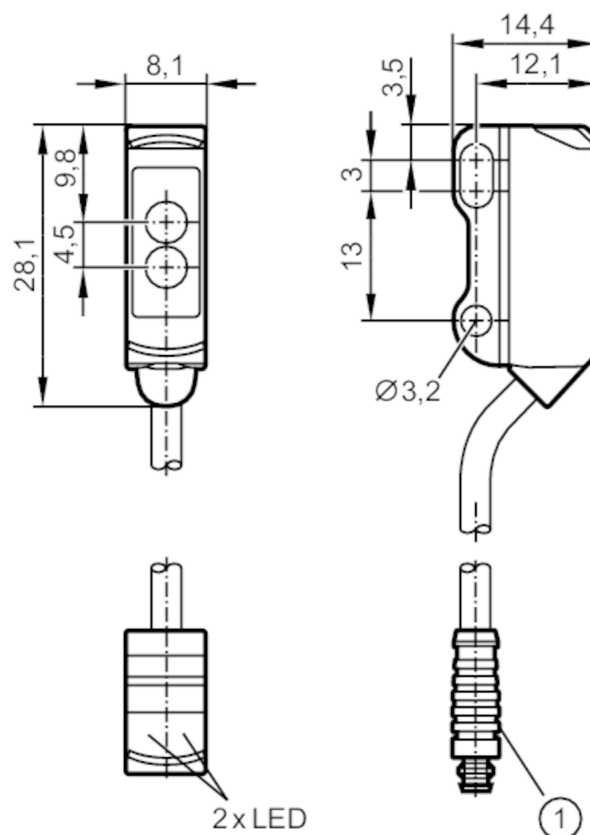




Retro-reflective sensor

O8P-FPKG/IO-Link/0,30M/AS/3P



1

receiver in upper lens
transmitter in lower lens
illustration (example)



Product characteristics

Type of light	red light
Housing	rectangular

Application

Special feature	polarisation 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	dark-on mode



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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		pulsed

Detection zone

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
Polarisation 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 type	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

Mechanical data

Weight	[g]	21.1
Housing		rectangular
Dimensions	[mm]	28.1 x 8.1 x 14.4
Materials		housing: ABS; stainless steel (316L/1.4404)
Lens material		PMMA
Lens alignment		side lens

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Displays / operating elements

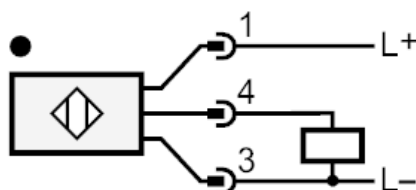
Display	switching status	1 x LED, yellow
	operation	1 x LED, green

Remarks

Pack quantity	1 pcs.
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Electrical connectionCable: 0.3 m, PVC, black, Ø 2.9 mm; 3 x 0.08 mm²

Connector: 1 x M8; coding: A

**Connection**

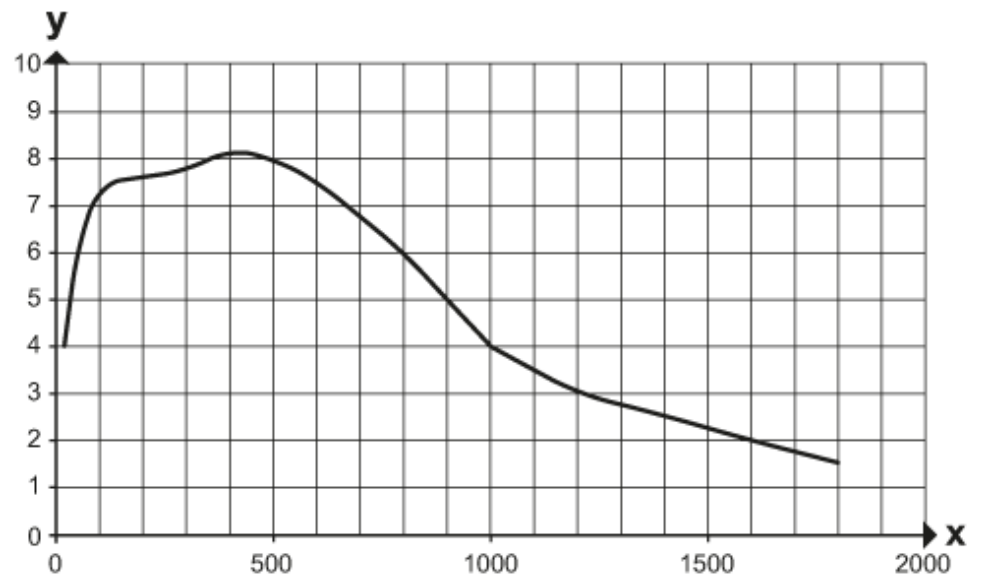


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Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor