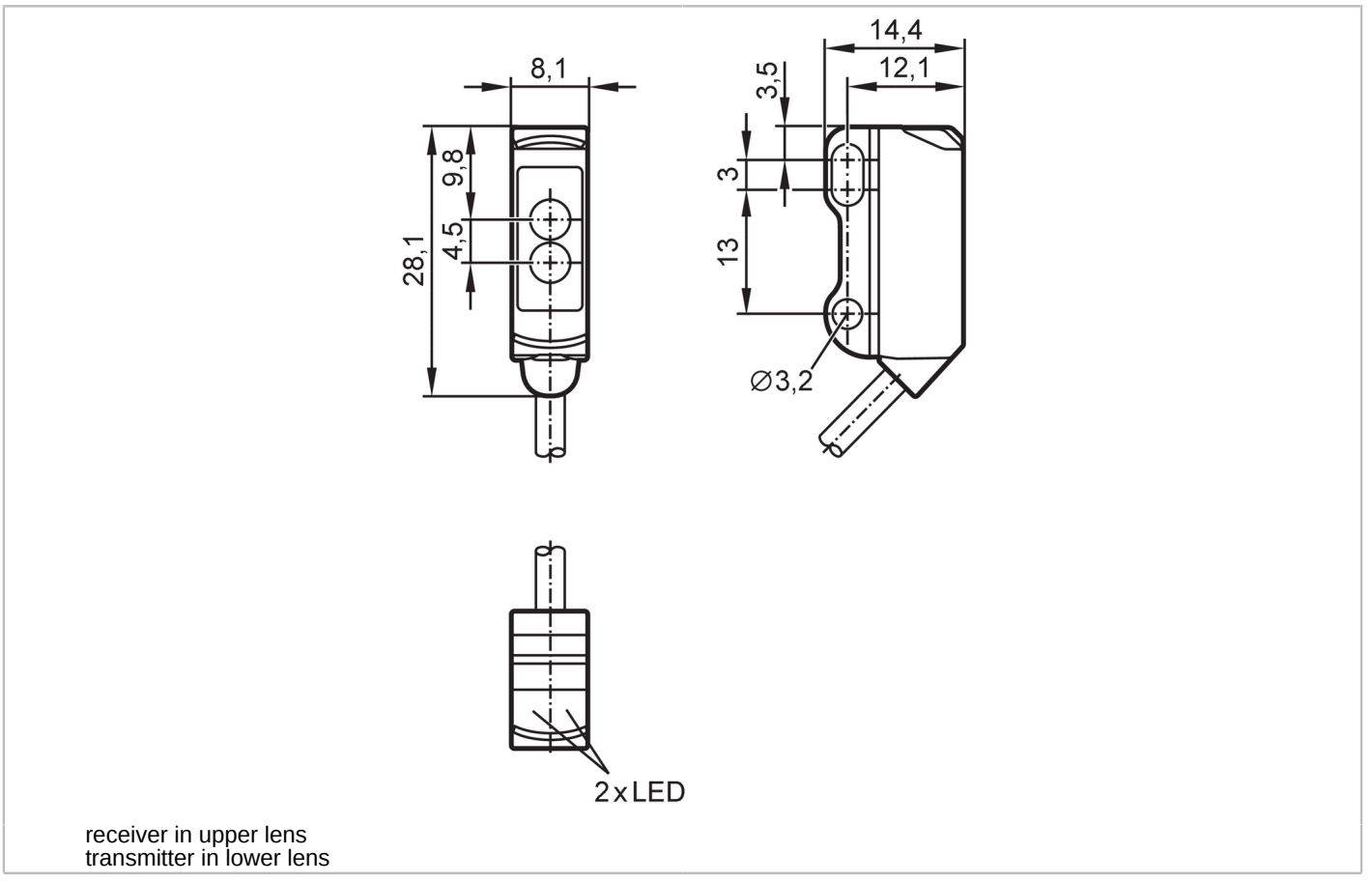
O8T200

Diffuse reflection sensor

O8T-FPKG/IO-Link/2,0M



receiver in upper lens
transmitter in lower lens

Product characteristics		
Type of light		red light
Housing		rectangular
Application		
Function principle		Diffuse reflection 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
Permanent current rating of switching output DC	[mA]	100

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Switching frequency DC	[Hz]	1000	
Short-circuit protection		yes	
Type of short-circuit protection		pulsed	
Detection zone			
Range	[mm]	0...180; (white paper 200 x 200 mm)	
Max. light spot diameter	[mm]	18	
Light spot dimensions refer to		at maximum range	
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 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	788
Operating conditions			
Ambient temperature	[°C]	-25...60	
Protection		IP 65; IP 67	
Tests / approvals			
EMC		EN 60947-5-2	
MTTF	[years]	1054	
UL approval		Ta	-25...60 °C
		Enclosure type	Type 1
		voltage supply	Limited Voltage/Current
		UL approval no.	E016
		File number UL	E174191
Mechanical data			
Weight	[g]	38.2	
Housing		rectangular	
Dimensions	[mm]	28.1 x 8.1 x 14.4	
Materials		housing: ABS; rear of the housing: stainless steel (316L/1.4404)	
Lens material		front pane:PMMA	
Lens alignment		side lens	

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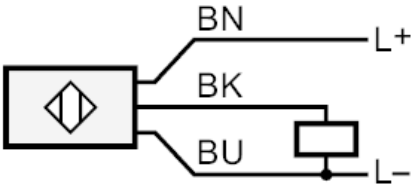
Displays / operating elements		
Display	switching status	1 x LED, yellow
	operation	1 x LED, green

Remarks	
Pack quantity	1 pcs.

Electrical connection

Cable: 2 m, PVC, black, Ø 2.9 mm; 3 x 0.08 mm²

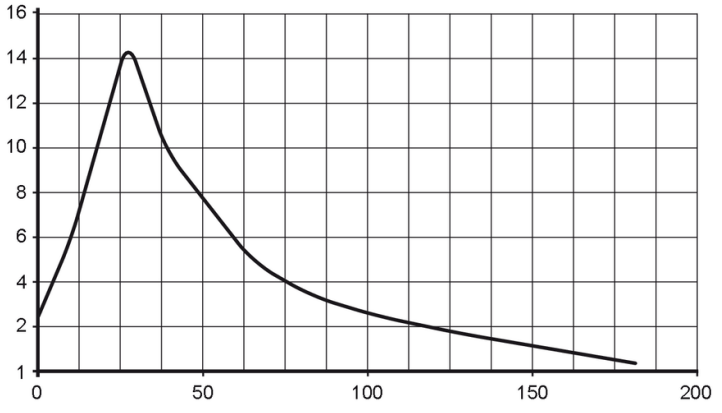
Connection



	Core colours :
BN	brown
BK	black
BU	blue

Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor