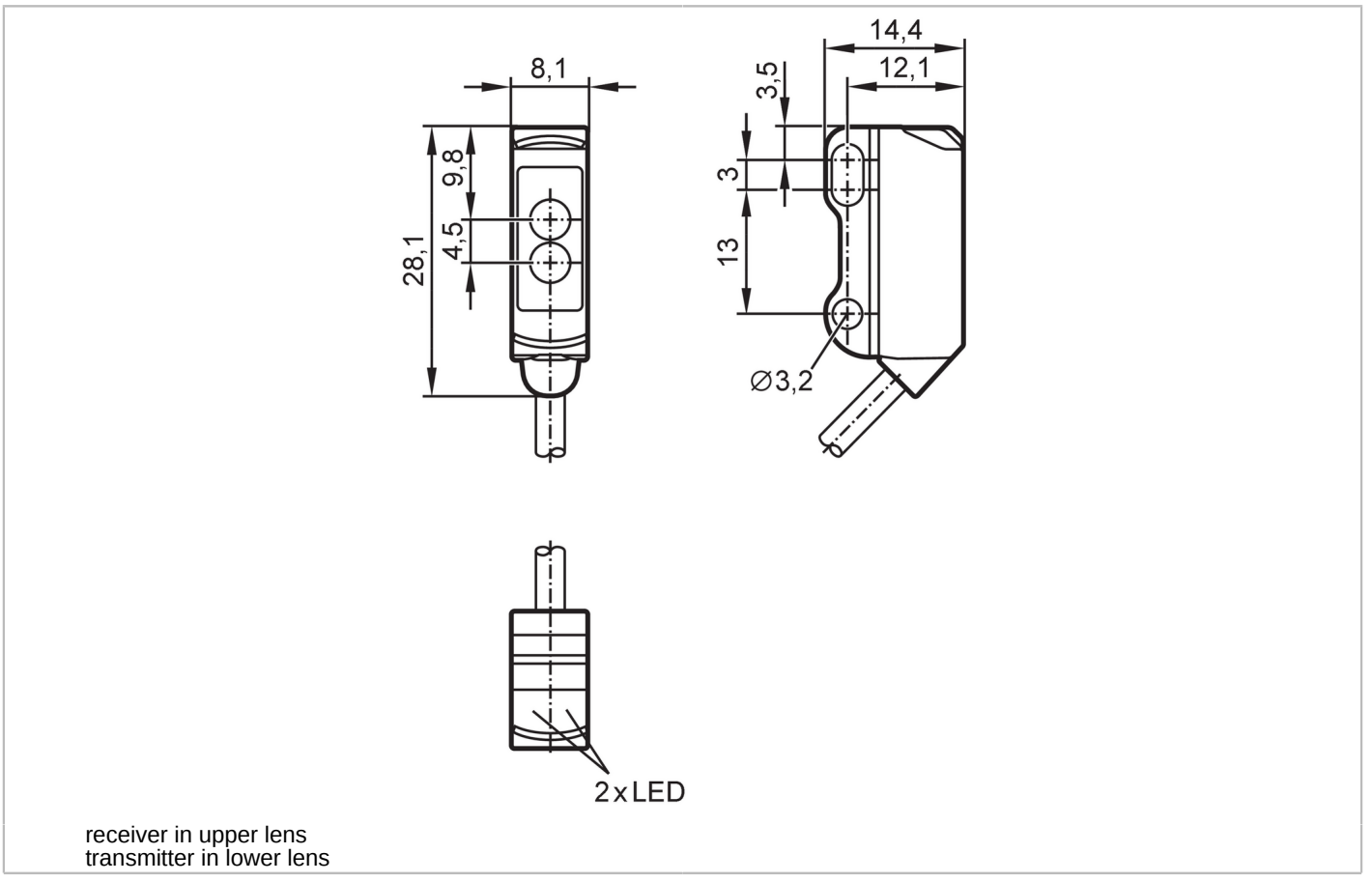
O8T201

Diffuse reflection sensor

O8T-HNKG/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		NPN
Output function		light-on mode
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	100

O8T201

Diffuse reflection sensor

O8T-HNKG/2,0M

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	
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 no.	E014
		File number UL	E174191
Mechanical data			
Weight	[g]	40	
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	
Displays / operating elements			
Display		switching status	1 x LED, yellow
		operation	1 x LED, green
Remarks			
Pack quantity		1 pcs.	

O8T201

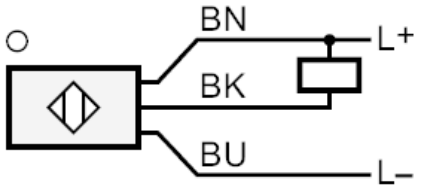
Diffuse reflection sensor

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Electrical connection

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

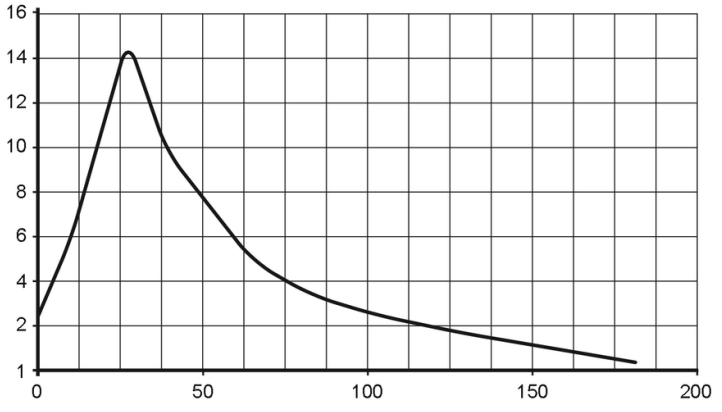
Connection



	Core colours :
BN =	brown
BK =	black
BU =	blue

Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor