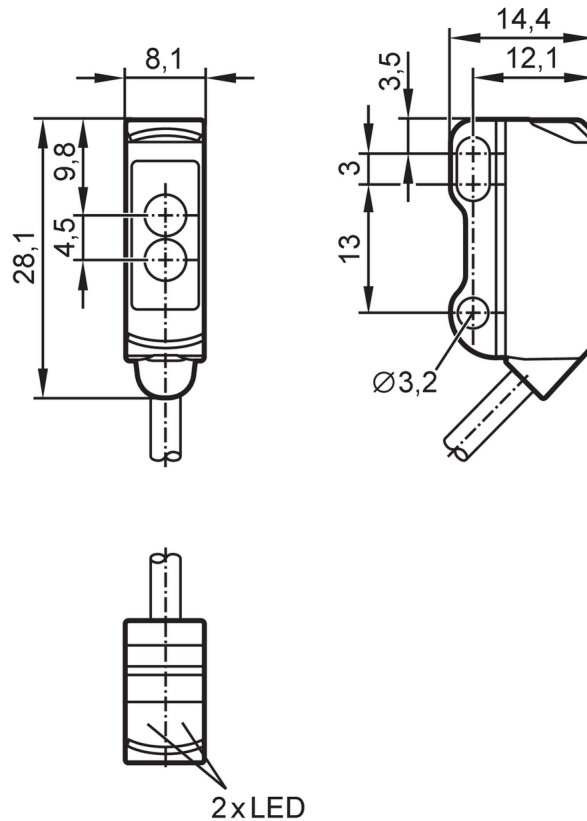


# O8T201



## 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
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### 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
Switching frequency DC	[Hz]	1000

# O8T201



## Diffuse reflection sensor

O8T-HNKG/2,0M

Short-circuit protection	yes	
Type of short-circuit protection	yes (non-latching)	
<b>Monitoring range</b>		
Range [mm]	0...180; (white paper 200 x 200 mm)	
Max. light spot diameter [mm]	18	
Light spot dimensions refer to	at maximum range	
<b>Operating conditions</b>		
Ambient temperature [°C]	-25...60	
Protection	IP 65; IP 67	
<b>Tests / approvals</b>		
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	E014
	File number UL	E174191
<b>Mechanical data</b>		
Weight [g]	40	
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	
<b>Displays / operating elements</b>		
Display	Switching status	1 x LED, yellow
	Power	1 x LED, green
<b>Remarks</b>		
Pack quantity	1 pcs.	

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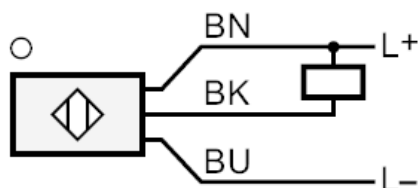
## Diffuse reflection sensor

O8T-HNKG/2,0M

### Electrical connection

Cable: 2 m, PVC, black,  $\varnothing$  2.9 mm; 3 x 0.08 mm<sup>2</sup>

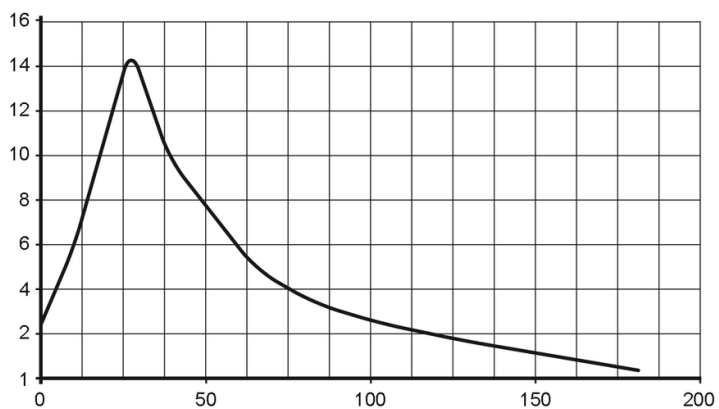
### Connection



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

### Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor