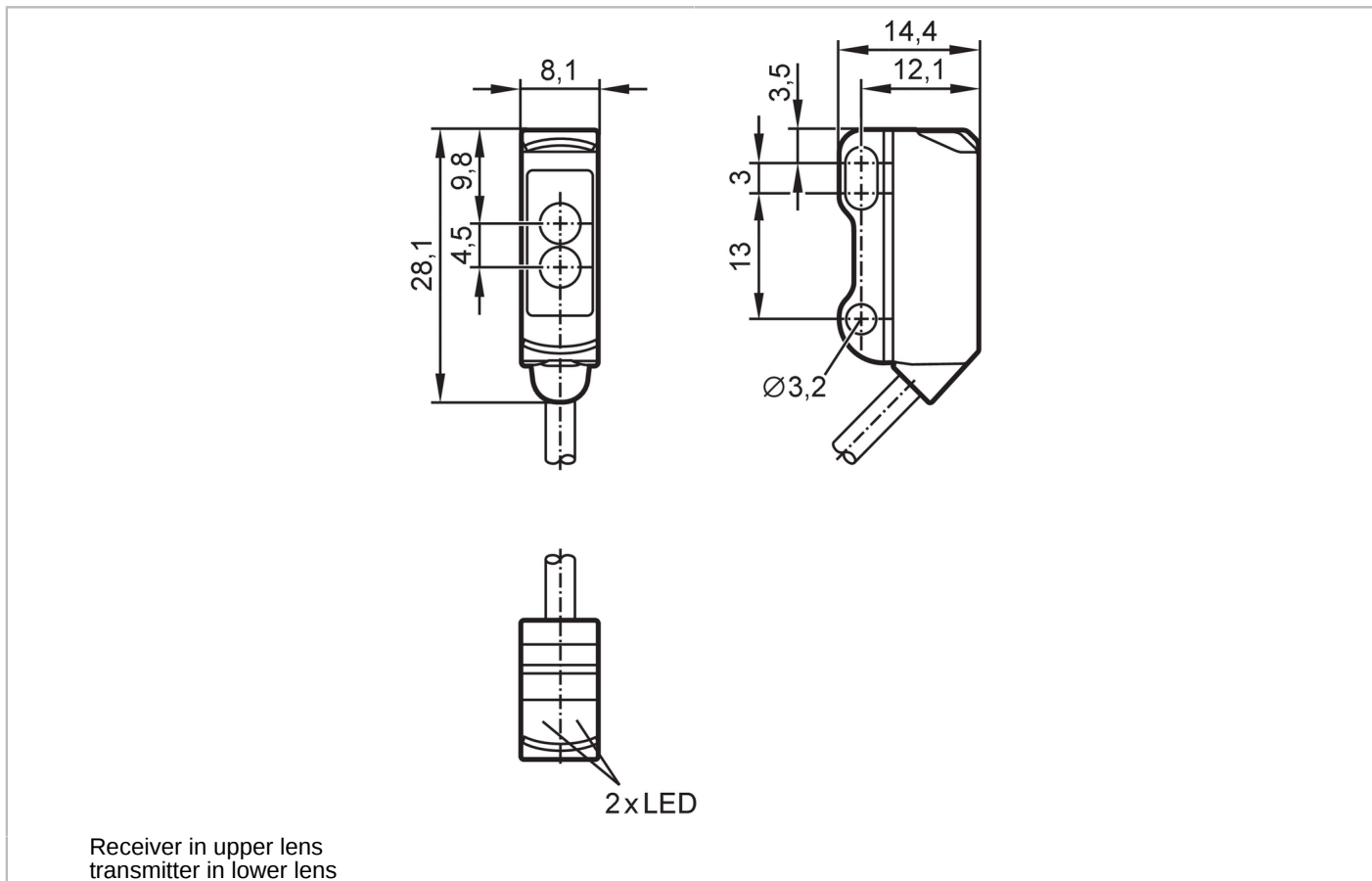


O8P201



Retro-reflective sensor

O8P-DNKG/2,0M



Product characteristics	
Type of light	red light
Housing	rectangular
Application	
Special feature	polarization filter
Function principle	Retro-reflective 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	dark-on mode
Max. voltage drop switching output DC [V]	2.5

O8P201



Retro-reflective sensor

O8P-DNKG/2,0M

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	no
Max. light spot diameter [mm]	120
Light spot dimensions refer to	at maximum range
Polarization filter available	yes

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	E014
	File number UL	E174191

Mechanical data	
Weight [g]	37.4
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

Displays / operating elements		
Display	Switching status	1 x LED, yellow
	Power	1 x LED, green

Remarks	
Pack quantity	1 pcs.

O8P201



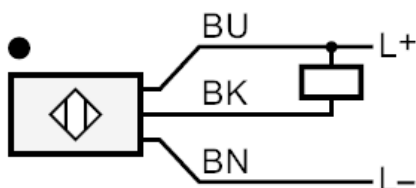
Retro-reflective sensor

O8P-DNKG/2,0M

Electrical connection

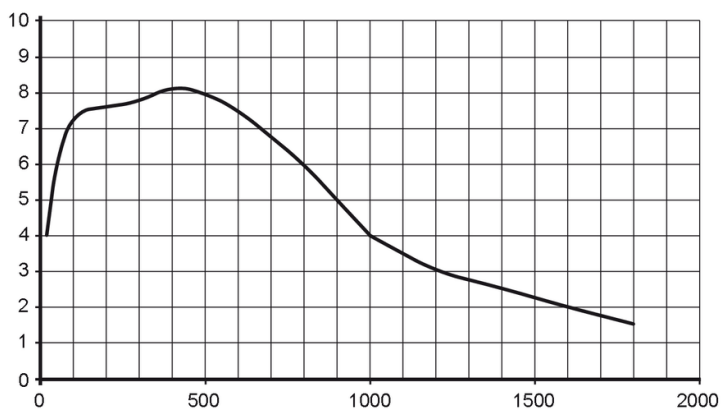
Cable: 2 m, PVC, black, \varnothing 2.9 mm; 3 x 0.08 mm²

Connection



Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor