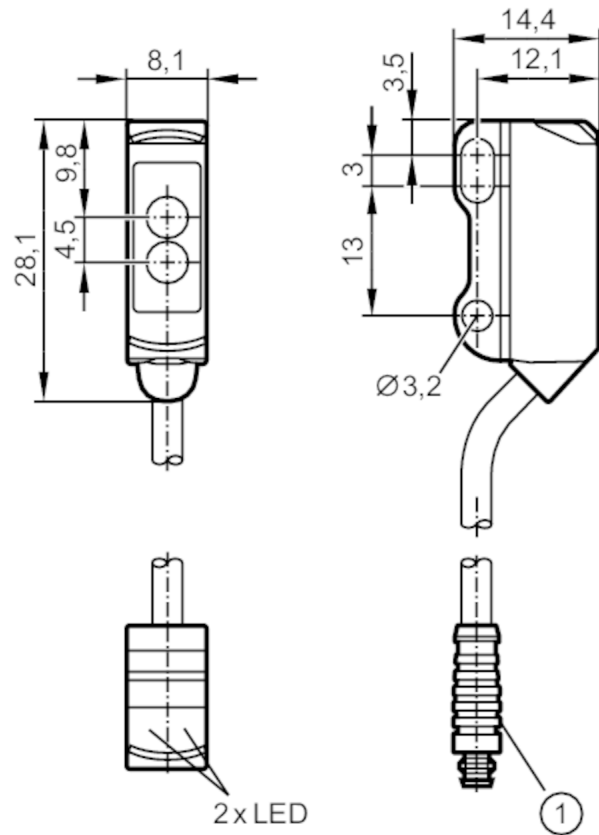


O8P203



Retro-reflective sensor

O8P-DNKG/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

System	polarization 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	NPN
Output function	dark-on mode



Retro-reflective sensor

O8P-DNKG/0,30M/AS/3P

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		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	E015
	File number UL	E174191

Mechanical data

Weight	[g]	21.2
Housing		rectangular
Dimensions	[mm]	28.1 x 8.1 x 14.4
Material		housing: ABS; stainless steel (1.4404 / 316L)
Lens material		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.
---------------	--	--------

O8P203



Retro-reflective sensor

O8P-DNKG/0,30M/AS/3P

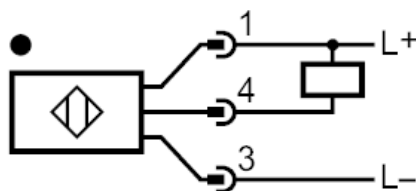
Electrical connection

Cable: 0.3 m, PVC, black, $\varnothing$ 2.9 mm; 3 x 0.08 mm²

Connector: 1 x M8; coding: A

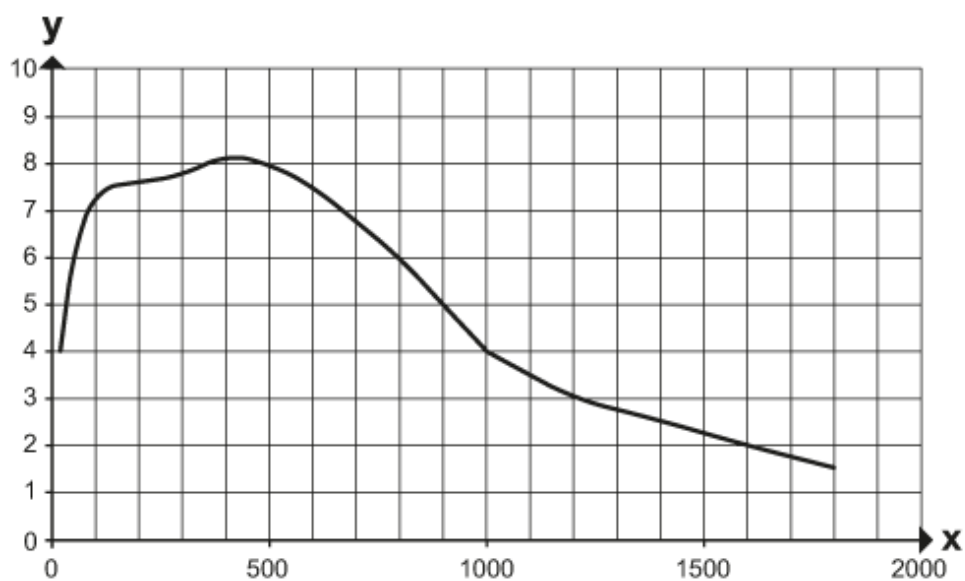


Connection



Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor