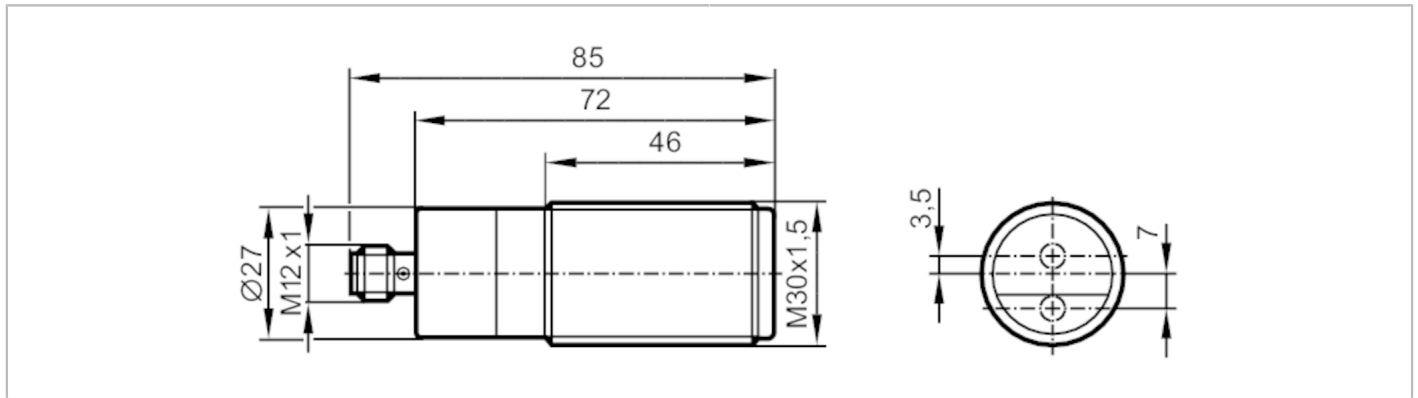


OID254



Photoelectric distance sensor

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Product characteristics	
Type of light	red light
Laser protection class	1
Application	
Special feature	Background suppression
Electrical data	
Operating voltage [V]	10...30 DC
Current consumption [mA]	75; (24 V)
Protection class	III
Reverse polarity protection	yes
Type of light	red light
Wave length [nm]	650
Typ. lifetime [h]	50000
Inputs / outputs	
Number of inputs and outputs	Number of digital outputs: 2
Inputs	
Input circuit of digital inputs	1 x 24 V PNP; (IEC 61131-2 Typ 3)
Outputs	
Total number of outputs	2
Electrical design	PNP
Number of digital outputs	2
Output function	normally open / normally closed; (complementary)
Max. current load per output [mA]	100
Switching frequency DC [Hz]	11
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes
Detection zone	
Max. light spot diameter [mm]	5
Light spot dimensions refer to	2 m



Photoelectric distance sensor

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Detection range hysteresis [%]	< 5
Note on monitoring range hysteresis	black 6% remission
Background suppression available	yes
Background suppression [m]	< 20

Measuring/setting range

Measuring range [m]	0.03...2
Sampling rate [Hz]	33

Interfaces

Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Smart Sensor: Sensor Identification; Binary Data Channel; Process Value; Sensor Diagnosis	
SIO mode	yes	
Process data analogue	1	
Process data binary	1	
Min. process cycle time [ms]	6.6	
Supported DeviceIDs	Type of operation	DeviceID
	Default	579

Operating conditions

Ambient temperature [°C]	-25...60
Note on ambient temperature	at ta < -10 °C warm-up is necessary, laser is off
Protection	IP 65; IP 67; IP 68; IP 69K

Tests / approvals

EMC	EN 60947-5-2	
Laser protection class	1	
Notes on laser protection	Caution:	laser light
	laser class:	1
		EN / IEC60825-1:2007
		EN / IEC60825-1:2014
	Complies with 21 CFR 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007.	
MTTF [years]	210	

Mechanical data

Weight [g]	227.5
Materials	housing: stainless steel; front pane: PMMA; PEI; EPDM

Displays / operating elements

Display	switching status	LED, yellow switching output 1
	operation	LED, green
Display unit	cm	

Accessories

Items supplied	lock nuts: 2 x M30, stainless steel
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OID254



Photoelectric distance sensor

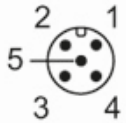
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Remarks

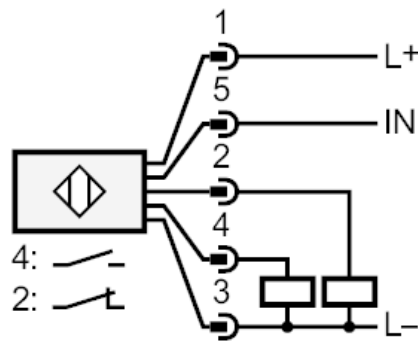
Remarks	operating voltage "supply class 2" according to cULus
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



Connection



4: OUT / IO-Link

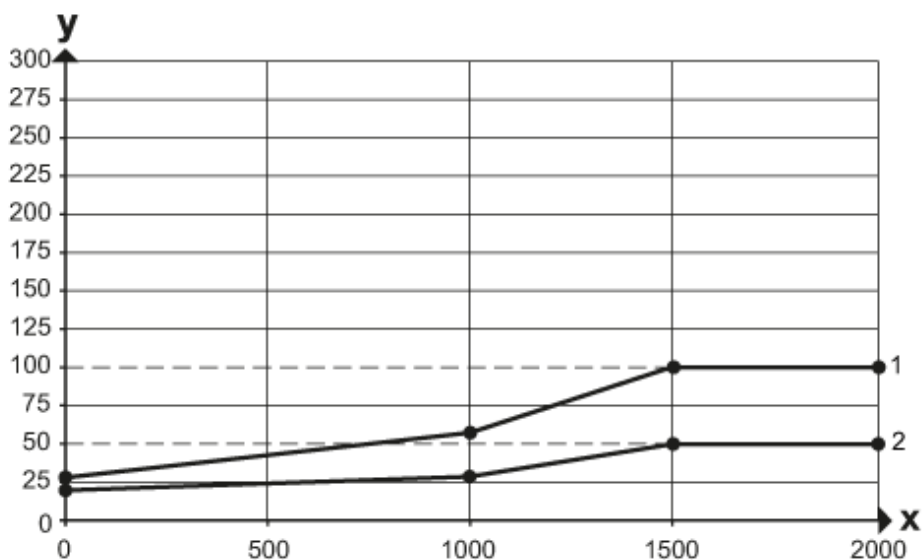


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Diagrams and graphs

hysteresis graph



x: distance [mm]

y: Hysteresis [mm]

1 = object black 6% remission

2 = object white 90% remission