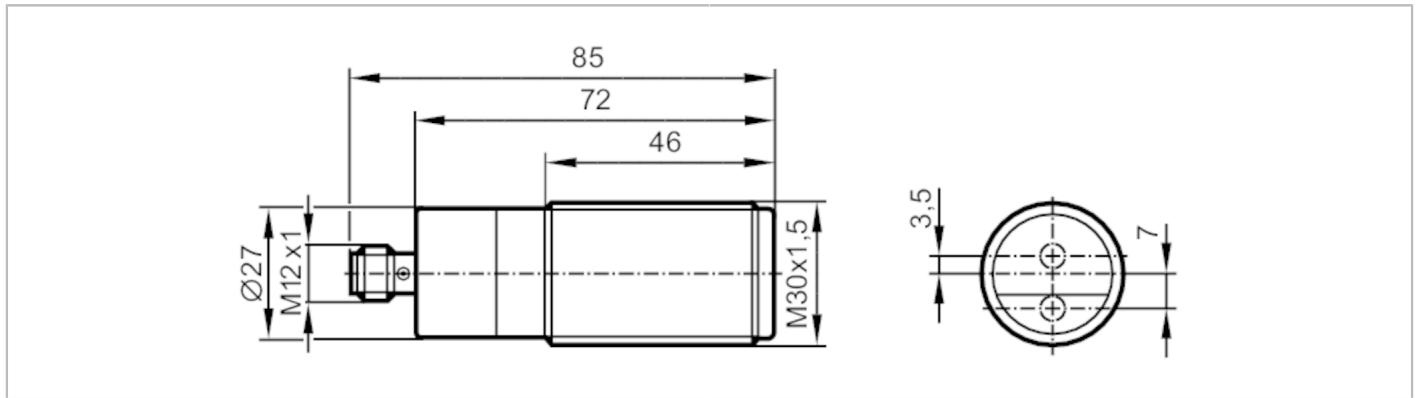


OID254



Photoelectric distance sensor

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Product characteristics	
Type of light	red light
Laser protection class	1
Application	
System	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 / closed; (complementary)
Max. current load per output [mA]	100
Switching frequency DC [Hz]	11
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

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Monitoring range		
Max. light spot diameter	[mm]	5
Light spot dimensions refer to		2 m
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 analog		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
Material		housing: stainless steel; front lens: PMMA; PEI; EPDM

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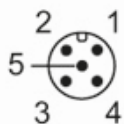
Photoelectric distance sensor

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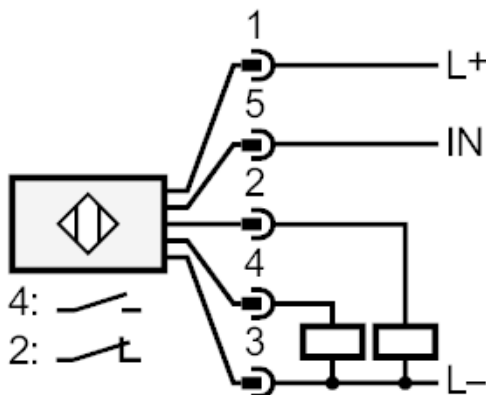
Displays / operating elements		
Display	Switching status	LED, yellow Switching output 1
	Power	LED, green
Display unit	cm	
Accessories		
Items supplied	lock nuts: 2 x M30, stainless steel	
Remarks		
Remarks	cULus - Class 2 source required	
Pack quantity	1 pcs.	

Electrical connection

Connector: 1 x M12; coding: A



Connection



4: OUT / IO-Link

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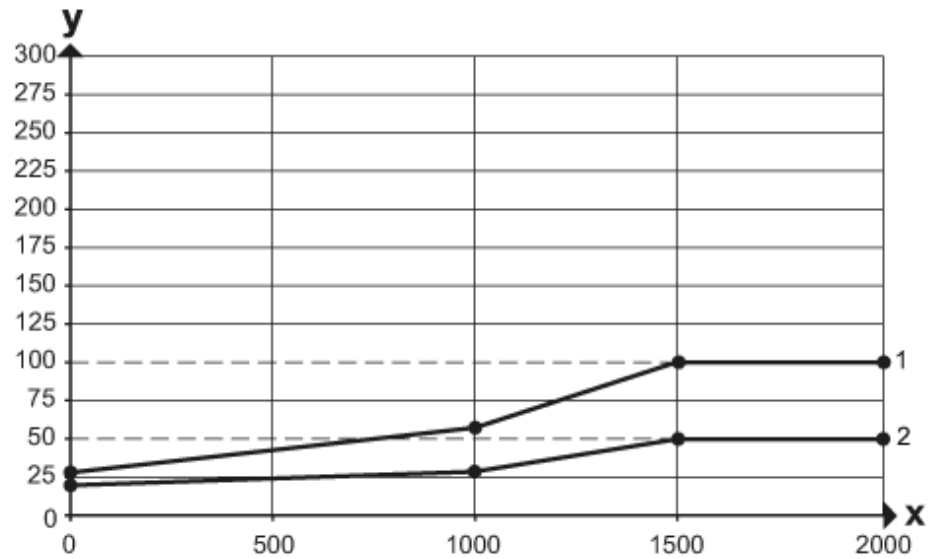


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Diagrams and graphs

Hysteresis graph



x: distance [mm]

y: Hysteresis [mm]

1 = object black 6 % remission

2 = object white 90 % remission