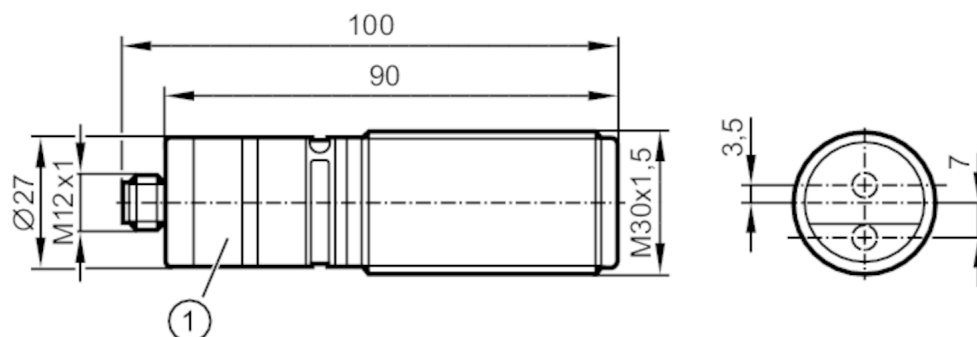


OID251



Laser distance sensor

OIDLCPKG/US



1: setting ring



Product characteristics

Type of light	red light
Laser protection class	1

Application

System	Background suppression
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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
------------------------------	------------------------------

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

Monitoring range

Max. light spot diameter	[mm]	5
Light spot dimensions refer to		2 m
Detection range hysteresis	[%]	< 5



Laser distance sensor

OIDLCPKG/US

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 CDV	
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	394
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	
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]	239	
Mechanical data		
Weight [g]	206.5	
Dimensions [mm]	M30 x 1.5 / L = 100	
Thread designation	M30 x 1.5	
Material	housing: stainless steel; front lens: PMMA; LED window: PC; PBT; PC; FKM	
Displays / operating elements		
Display	Switching status	LED, yellow
	Power	LED, green
Display unit	cm	
Operating elements	setting ring	

OID251



Laser distance sensor

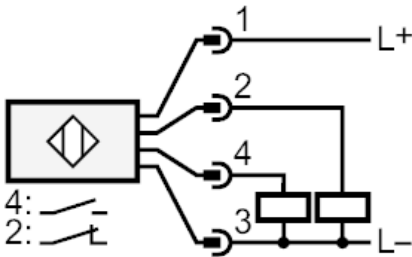
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Accessories	
Items supplied	lock nuts: 2 x M30, stainless steel
Remarks	
Remarks	cULus - Class 2 source required
Pack quantity	1 pcs.
Electrical connection	

Connector: 1 x M12; coding: A



Connection

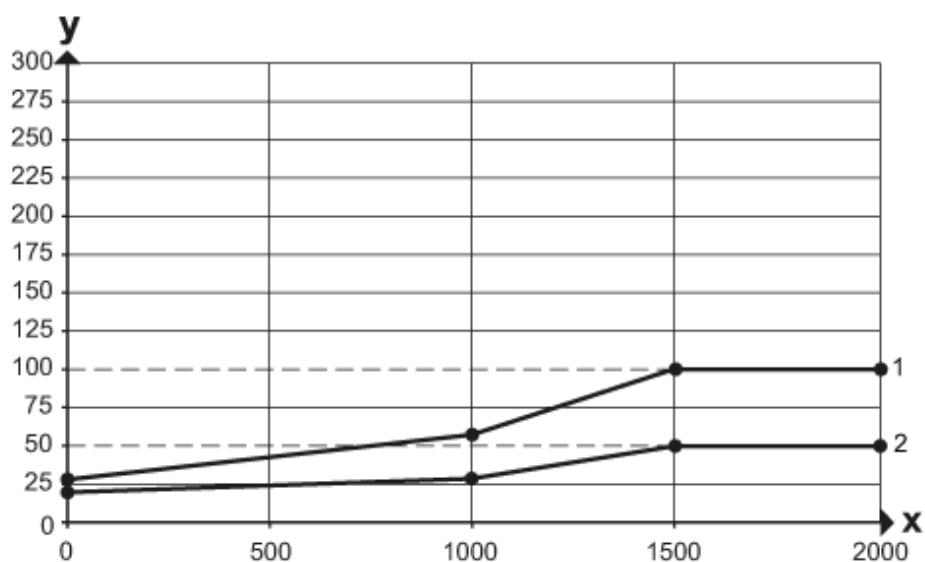


4: OUT / IO-Link



Diagrams and graphs

Hysteresis graph



x: distance [mm]

y: Hysteresis [mm]

1 = object black 6 % remission

2 = object white 90 % remission