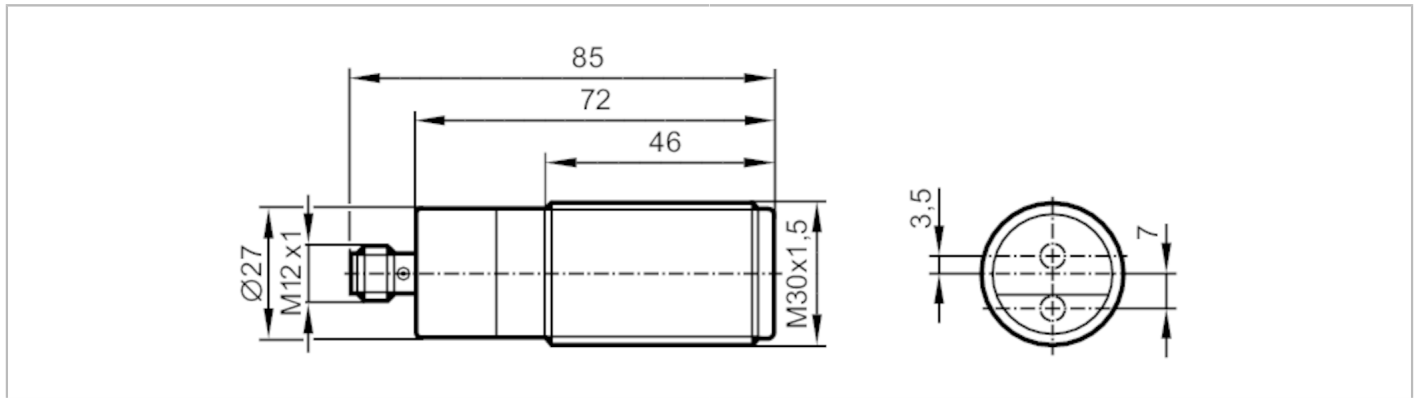


# OID254



## Laser distance sensor

OIDLCPKG/US



Product characteristics	
Type of light	red light
Laser protection class	1
Housing	Threaded type
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
Monitoring range	
Max. light spot diameter [mm]	5

# OID254



## Laser distance sensor

OIDLCPKG/US

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 - SSP 0	Generic Profiled Sensor
	Function	Multiple switching signal
	Function	Process data variable
SIO mode	yes	
Process data analog	1	
Process data binary	1	
Min. process cycle time [ms]	6.4	
Supported DeviceIDs	<b>Type of operation</b>	<b>DeviceID</b>
	default	579

### Operating conditions

Ambient temperature [°C]	-25...60
Note on ambient temperature	at $t_a < -10$ °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 1040.10 except for conformance with IEC 60825-1 Ed. 3, as described in Laser Notice No. 56, dated May 8, 2019.
MTTF [years]	210	
UL approval	voltage supply	Class 2
	File number UL	E174191

### Mechanical data

Weight [g]	217.15
Housing	Threaded type
Dimensions [mm]	M30 x 1.5 / L = 85

# OID254



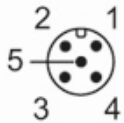
## Laser distance sensor

OIDLCPKG/US

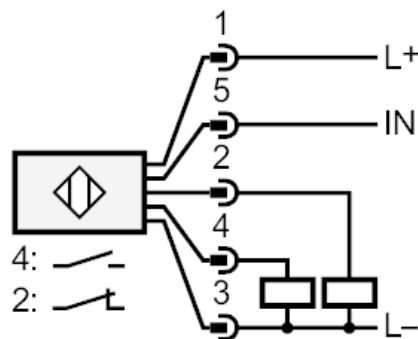
Thread designation	M30 x 1.5	
Material	housing: stainless steel; front lens: PMMA; PEI; EPDM	
<b>Displays / operating elements</b>		
Display	Switching status	LED, yellow Switching output 1
	Power	LED, green
Display unit	cm	
<b>Accessories</b>		
Items supplied	lock nuts: 2 x M30, stainless steel	
<b>Remarks</b>		
Pack quantity	1 pcs.	

### Electrical connection

Connector: 1 x M12; coding: A



### Connection



4: OUT / IO-Link

# OID254

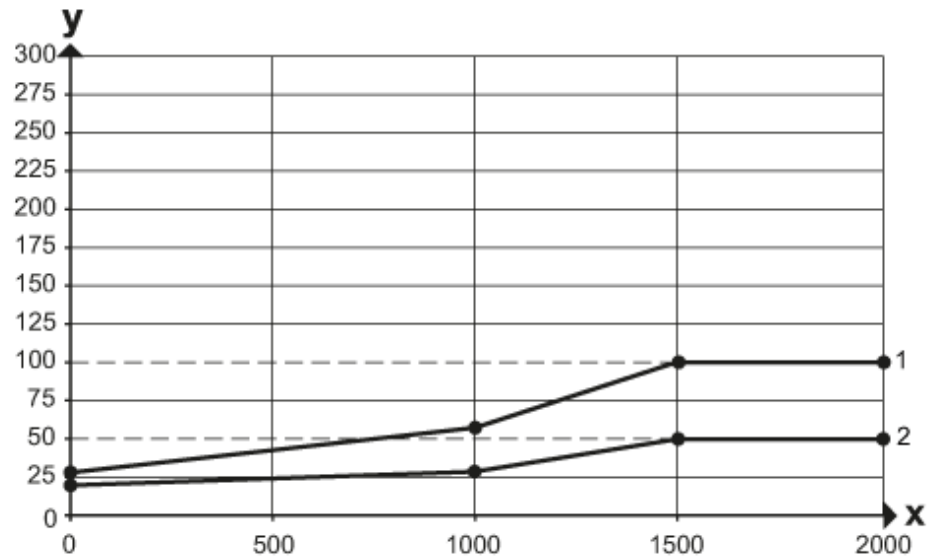


## Laser distance sensor

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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