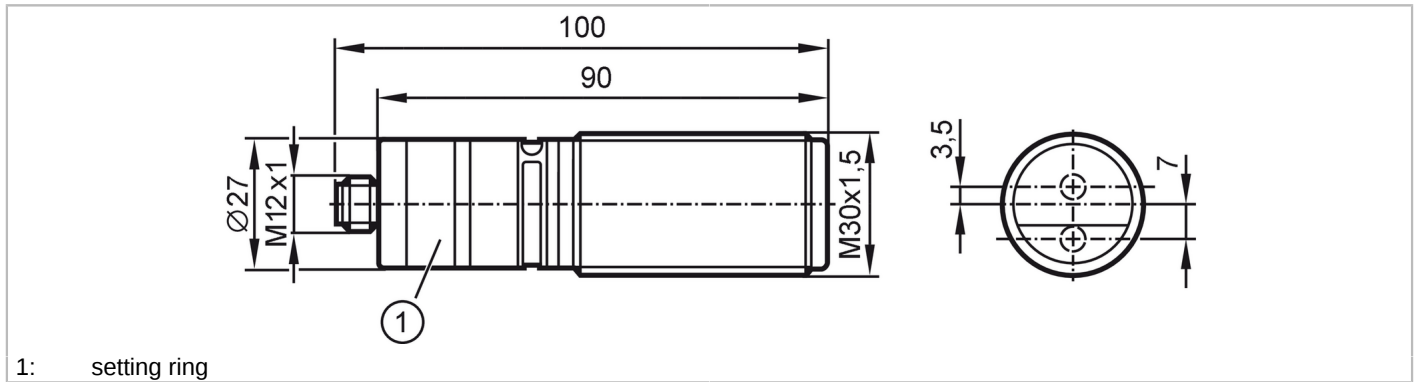


OID201



Laser distance sensor

OIDLCPKG/US



Product characteristics	
Type of light	red light
Laser protection class	2
Housing	Threaded type
Application	
Special feature	Background suppression
Application	Industrial applications
Electrical data	
Operating voltage [V]	10...30 DC; (cULus - Class 2 source required)
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 [%]	< 2

OID201



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
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	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
Max. immunity to extraneous light [klx]	10; (on the object)

Tests / approvals	
EMC	EN 60947-5-2
Laser protection class	2
Notes on laser protection	Caution: Laser light
	Power: <= 4,0 mW
	Wave length: 650 nm
	pulse: 1,3 ns
	Do not stare into beam.
	Avoid exposure to the laser light.
	laser class: 2
	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]	239

Mechanical data	
Weight [g]	206.5

OID201



Laser distance sensor

OIDLCPKG/US

Housing	Threaded type
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 Switching output PIN 4
	Power	LED, green
Display unit	cm	
Operating elements	setting ring	

Accessories

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

Remarks

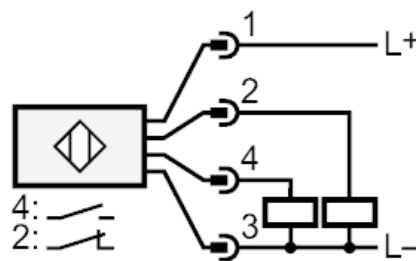
Pack quantity	1 pcs.
---------------	--------

Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4



Connection



4: OUT / IO-Link

OID201

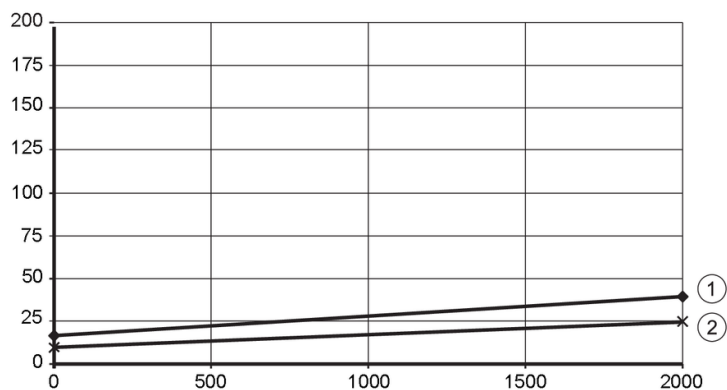


Laser distance sensor

OIDLCPKG/US

Diagrams and graphs

Hysteresis graph



x: distance [mm]

y: Hysteresis [mm]

1 = background black 6 % remission

2 = background white 90 % remission