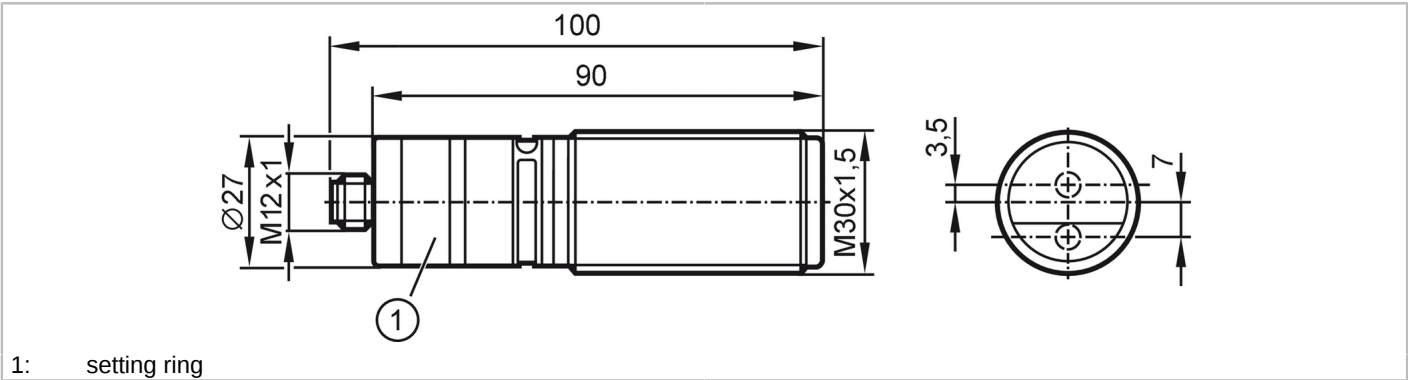


OID200



Laser distance sensor

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Product characteristics		
Type of light		red light
Laser protection class		2
Housing		Threaded type
Application		
Special feature		Background suppression
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



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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	373
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]	207	

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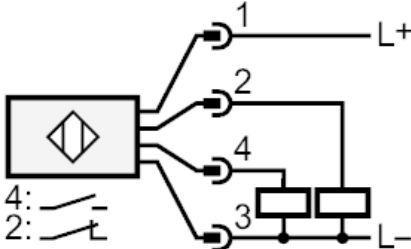
Housing	Threaded type
Dimensions [mm]	M30 x 1.5 / L = 100
Thread designation	M30 x 1.5
Material	housing: stainless steel; front lens: PMMA; LED window: PC; PBT; PC; FKM

Displays / operating elements		
Display	Switching status	LED, yellow Switching output PIN 4
	Power	LED, green
With scale	yes	
Display unit	cm; inch	
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	
	

Connection	
	
4:	OUT / IO-Link

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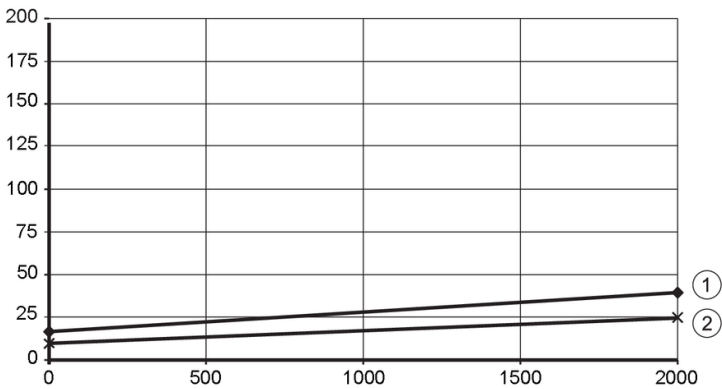


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Diagrams and graphs

Hysteresis graph



x: distance [mm]
y: Hysteresis [mm]
1 = background black 6 % remission
2 = background white 90 % remission