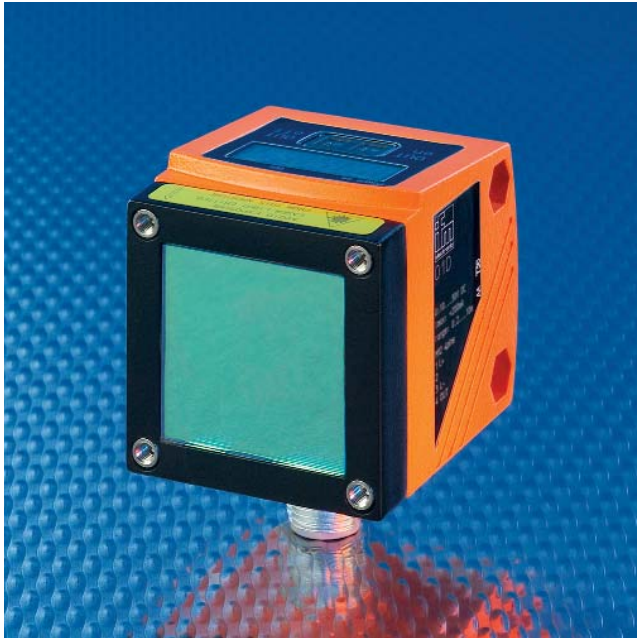




efector[®] pmd 10 m range with background suppression!



Compact diffuse laser with unique features.

- Precise background suppression even at distances up to 10 m.
- Exact indication of the distance to the object or background.
- Visible laser light for easy alignment to the object.
- Excellent price / performance ratio.
- Easy teach mode for fast set-up.



High sensing range	High accuracy	TEACH-IN for simple operation.	LED display
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PMD technology

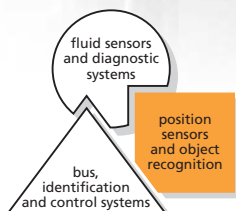
Using the innovative ON-chip time of flight measurement system with PMD technology (Photonic Mixer Device) the O1D101 is a diffuse reflection sensor with a unique range of 10 m in a very compact housing.

Background suppression

The precision of the laser detection system enables the safe detection of objects at very long distances. The object may be only a few centimetres away from a background.

Easy teach mode

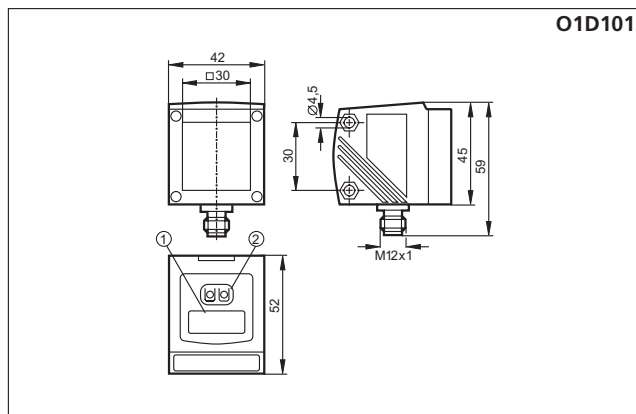
For set-up the object and the background are detected by simply pressing a pushbutton – finished! This is all that is necessary for safe functioning.



Applications:
Background suppression at long distances

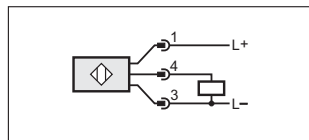
Electrical design	Light spot diameter [mm]	Operating voltage [V]	Current consumption [mA]	Switching frequency [Hz]	Operating temperature [°C]	Protection	Order no.
M12 connector · laser protection class 2 · range 0.2...10 m							
DC PNP	6 (at 10 m)	10...30 DC	< 150	5	-10...60	IP 65, III	O1D101
DC NPN	6 (at 10 m)	10...30 DC	< 150	5	-10...60	IP 65, III	O1D104

Dimensions




- 1) 4-digit alphanumeric display
- 2) Programming buttons






Wiring diagram







Accessories

Type	Description	Order no.
	Stainless steel mounting set for rod mounting Ø 12 mm	E2D101
	Stainless steel mounting set for rod mounting Ø 14 mm	E2D111

Further technical data

Type O1D101	
Output function	OUT  /  programmable
Short-circuit prot., pulsed	
Rev. polarity / overl. protection	 / 
EMC	EN 60947-5-2
Material	housing: diecast zinc front pane: glass LED window: polycarbonate
Function display	
Switching status	LED
Power	LED
Distance, Teach mode	4-digit alphanumeric display

Connectors and splitter boxes

Type	Description	Order no.
	Socket, M12, 5 m orange, PVC cable	E10662
	Socket, M12, 10 m orange, PVC cable	E10663
	Socket, M12, 5 m orange, PVC cable	E10700
	Socket, M12, 10 m orange, PVC cable	E10701

Measuring range	Repeatability*		Accuracy*	
	white (90 % remission)	grey (18 % remission)	white (90 % remission)	grey (18 % remission)
200...1000 mm	± 4 mm	± 5 mm	± 14 mm	± 15 mm
1000...2000 mm	± 5 mm	± 6 mm	± 15 mm	± 16 mm
2000...4000 mm	± 14 mm	± 16 mm	± 24 mm	± 26 mm
4000...6000 mm	± 21 mm	± 25 mm	± 31 mm	± 35 mm
6000...10000 mm	± 41 mm		± 51 mm	

* The values indicated for repeatability and accuracy refer to a switching frequency of 5 Hz.
The values apply at constant ambient conditions, (23 °C / 960 hPa), extraneous light of max. 8 klx, only after unit powered up for 10 minutes.