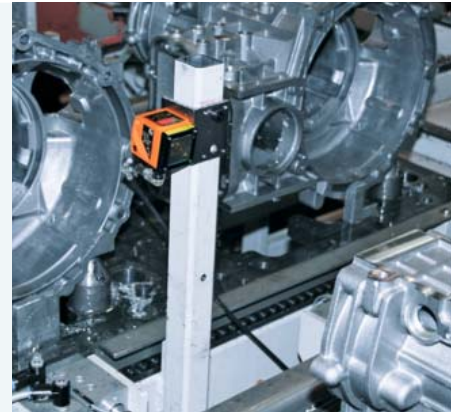




Position sensors

# O1D with PMD technology – ready for Industry 4.0



Laser sensors / distance sensors



**Optical distance detection with a range of up to 10 m**

**2 switching outputs; one output can be configured as analogue output**

**Resistant to extraneous light up to 100,000 lux**

**Can be used in applications needing background suppression**

**IO-Link for easy setting and replacement of sensors**



## **PMD distance sensors with IO-Link**

Thanks to the innovative on-chip time-of-flight principle with PMD technology, this sensor offers all the capability of a measurement system. It now comes with IO-Link functionality for simpler parameter setting and distance value transmission. The signal strength can now be sent via IO-Link. This makes it possible to distinguish many different components within the same application by their object contrasts.

O1D is insensitive to extraneous light up to 100,000 lux and remains unaffected even if direct sunlight hits the sensor or target, thus operating reliably and accurately at all times.



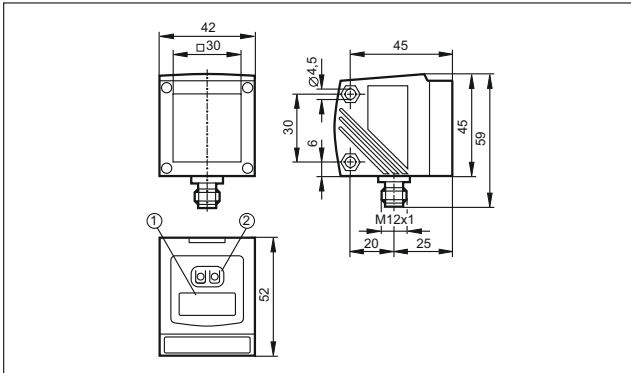
Electrical design	Background suppression [m]	Switching outputs	Laser class	Sampling rate [Hz]	Spot diameter [mm]	Operating range [m]	Order no.
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### Distance detection

DC PNP	0...19	2*	2	max. 50, adjustable	15 x 15 (at 10 m)	0.2...10	<b>O1D120</b>
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\* one switching output can be configured as analogue output (0...10 V or 4...20 mA)

### Dimensions



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

### Accessories

Type	Description	Order no.
	Mounting set for clamp mounting, Ø 12 mm, stainless steel	<b>E2D101</b>
	Cube for mounting on an aluminium profile, M10 thread, diecast zinc	<b>E20951</b>
	Protective cover, plastic, PMMA	<b>E21133</b>
	Protective cover, glass	<b>E21171</b>
	Cooling and protection box, aluminium	<b>E21248</b>
	Memory plug, parameter memory for IO-Link sensors	<b>E30398</b>
	USB IO-Link master for parameter setting and analysis of units Supported communication protocols: IO-Link (4.8, 38.4 and 230 Kbits/s)	<b>E30390</b>
	LR DEVICE (supplied on USB flash drive) Software for online and offline parameter setting of IO-Link sensors and actuators	<b>QA0011</b>

### Further technical data

Type O1D		
Operating voltage	[V]	18...30 DC
Connection		M12 connector
Protection		IP 67 / III
Short-circuit protection, pulsed		•
Reverse polarity / overload protection		• / •
EMC		EN 60947-5-2
Material	Housing Front lens LED window	diecast zinc glass polycarbonate
Function display		
Switching status	LED	yellow
Operation	LED	green
Distance value, programming		4-digit alphanumeric display

### Connection technology

Type	Description	Order no.
	Socket, M12, 2 m black, PUR cable	<b>EVC001</b>
	Socket, M12, 5 m black, PUR cable	<b>EVC002</b>
	Socket, M12, 2 m black, PUR cable	<b>EVC004</b>
	Socket, M12, 5 m black, PUR cable	<b>EVC005</b>
	Socket, M12, 2 m orange, PVC cable	<b>EVT064</b>
	Socket, M12, 5 m orange, PVC cable	<b>EVT001</b>
	Socket, M12, 2 m orange, PVC cable	<b>EVT067</b>
	Socket, M12, 5 m orange, PVC cable	<b>EVT004</b>