

PMDLine series – a new generation of photoelectric sensors



O5D with display – first standard photocell with time of flight measurement (PMD)

- Reliable background suppression and colour-independent detection
- Precise time of flight measurement in housing sizes of standard photoelectric sensors
- Shiny surfaces are detected reliably (e.g. stainless steel)
- Any sensor position, even an oblique angle to the object
- Switch point setting to the nearest centimetre via "+/-" buttons and display



Time of flight measurement for standard sensors

The O5D with time of flight measurement (PMD = photonic mixer device) combines the following advantages: long ranges, reliable background suppression, visible red light and high excess gain. In the same price range as standard sensors, it is a clever alternative.

Easy handling

The switch point is set easily to the nearest centimetre via "+/-" buttons and display or alternatively via IO-Link, which also allows read-out of the actual value.

Any surface and any mounting position

Shiny, matt, dark or light objects of any colour: the O5D features reliable background suppression. The unit allows any angle of incidence and thus flexible mounting positions. This simplifies installation and saves costs.



Position sensors

Laser sensors / distance measurement sensors



Measuring range [mm]	Background suppression [m]	Switching frequency [Hz]	Hysteresis [%]	Spot Ø at max. range [mm]	Current consumption [mA]	Unit of measurement	Order no.
30...2000	...20	11	< 6*	< 5	< 75	cm	O5D100
30...2000	...20	11	< 6*	< 5	< 75	inch	O5D101

* black (6 % remission) in case of max. range



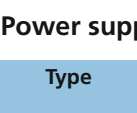

Accessories

Type	Description	Order no.
	Mounting bracket for rod, complete set incl. clamp	E21083
	Protective bracket for rod, complete set incl. clamp	E21084
	Rod, 100 mm, Ø 12 mm, M10 thread, stainless steel	E20938
	Cube for mounting on an aluminium profile, M10 thread, diecast zinc	E20951
	Universal angle bracket	E21085
	Bracket for free-standing mounting	E21087
	Dovetail clamp	E21088
	Memory plug, parameter memory for IO-Link sensors	E30398
	IO-Link interface, current consumption from USB port	E30396
	LINERECORDER SENSOR, software for parameter setting and set-up of IO-Link sensors	ZGS210


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Common technical data		
Type of light		visible laser light 650 nm
Extraneous light on the object	[klx]	max. 8
Dimensions	[mm]	56 x 18,2 x 46,5
Operating voltage	[V DC]	10...30
Switching status indication	LED	yellow
Operation	LED	green
Distance value		3-digit alphanumeric display
Output function		OUT1: NO OUT2: NC
Current rating	[mA]	2 x 100
Protection rating, protection class		IP 65, IP 67 II
Short-circuit protection, pulsed		•
Reverse polarity protection / overload protection		• / •
Ambient temperature	[°C]	-25...60
Material	housing / plug adapter front pane / LED window bezel operator interface	PA PMMA stainless steel TPU

Connection technology

Type	Description	Order no.
	Socket, M12, 2 m black, PUR cable	EVC001
	Socket, M12, 5 m black, PUR cable	EVC002
	Socket, M12, 2 m black, PUR cable	EVC004
	Socket, M12, 5 m black, PUR cable	EVC005

Power supplies

Type	Description	Order no.
	Metal housing, 24 V DC, 3.3 A	DN4011