



Position sensors

# Spot on! – the new O6 laser



Laser sensors



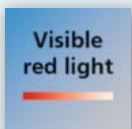
**Whole family of laser sensors  
in a market standard housing  
with 1" centres**

**The distance value to the object  
can be provided via IO-Link**

**Precise setting via tactile teach  
buttons or IO-Link**

**Uniform light spot for reliable,  
precise detection**

**Consistent laser alignment  
in all units**



## Precise laser for the detection of tiny objects

The new O6 with laser protection class 1 enables reliable detection of tiny objects where conventional red light sensors reach their limits. One of its highlights is that it features IO-Link as a standard feature.

## IO-Link opens up completely new perspectives

Similar to analogue sensors, the distance value in mm to the object can be provided via IO-Link. This turns a binary diffuse reflection laser sensor into a precise distance measurement system. New application possibilities include length and height monitoring.

Besides, inspection tasks such as the detection of the presence of parts or their correct installation are possible via the precise distance detection. The sensor features a reliable range of 100 mm, even for objects with different colours. With IO-Link, the user is now well prepared for Industry 4.0.



Design [H, W, D]	Range [mm]	Spot Ø at max. range* [mm]	Connection	Order no.	Order no.
<b>Diffuse reflection sensor with background suppression, 3-wire DC</b>				<b>PNP IO-Link 1.1</b>	<b>NPN</b>
Rectangular 35 x 13 x 21 mm	100	2	2 m, PUR cable	<b>O6H700</b>	<b>O6H703</b>
	100	2	0.3 m PUR cable / M12 connector, 4-pole	<b>O6H701</b>	<b>O6H704</b>
	100	2	M8 connector, 4-pole	<b>O6H702</b>	<b>O6H705</b>
<b>Retro-reflective sensor with polarisation filter, 3-wire DC</b>				<b>PNP IO-Link 1.1</b>	<b>NPN</b>
Rectangular 35 x 13 x 21 mm	300...8000**	< 17	2 m, PUR cable	<b>O6P700</b>	<b>O6P703</b>
	300...8000**	< 17	0.3 m PUR cable / M12 connector, 4-pole	<b>O6P701</b>	<b>O6P704</b>
	300...8000**	< 17	M8 connector, 4-pole	<b>O6P702</b>	<b>O6P705</b>
<b>Through-beam sensor transmitter, DC</b>					
Rectangular 35 x 13 x 21 mm	15000	< 35	2 m, PUR cable	<b>O6S700</b>	
	15000	< 35	0.3 m PUR cable / M12 connector, 4-pole	<b>O6S701</b>	
	15000	< 35	M8 connector, 4-pole	<b>O6S702</b>	
<b>Through-beam sensor receiver, 3-wire DC</b>				<b>PNP IO-Link 1.1</b>	<b>NPN</b>
Rectangular 35 x 13 x 21 mm	15000	–	2 m, PUR cable	<b>O6E700</b>	<b>O6E703</b>
	15000	–	0.3 m PUR cable / M12 connector, 4-pole	<b>O6E701</b>	<b>O6E704</b>
	15000	–	M8 connector, 4-pole	<b>O6E702</b>	<b>O6E705</b>

\* at max. range / \*\* referred to prismatic reflector E20722

## Accessories

Design	Description	Order no.
	Mounting set for clamp mounting, stainless steel, Ø 10 mm	<b>E21272</b>
	Rod, 120 mm, Ø 10 mm, M8 thread, stainless steel	<b>E21081</b>
	USB IO-Link master for parameter setting and analysis of units Supported communication protocols: IO-Link (4.8, 38.4 and 230 kBit/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>
	Socket, M12, 2 m black, PUR cable	<b>EVC001</b>
	Socket, M12, 5 m black, PUR cable	<b>EVC002</b>
	Socket, M8, 4-pole 2 m black, PUR cable	<b>EVC150</b>
	Socket, M8, 4-pole 5 m black, PUR cable	<b>EVC151</b>

## Common technical data

Operating voltage	[V DC]	10...30
Type of light / wave length		laser light 650 nm
Laser protection class		1
Output H = light-on / D = dark-on mode		H / D selectable
Protection rating, protection class		IP 65 / IP 67 III
Switching frequency	[Hz]	1000
Switching status indication	LED	yellow
Operation	LED	green
Current rating	[mA]	100
Voltage drop	[V]	< 2.5
Short-circuit protection, pulsed		•
Reverse polarity protection / overload protection		• / •
Ambient temperature	[°C]	-10...60
Materials	Housing Lens	ABS; PPSU PMMA