



Position sensors

Spot on! – the new O6 laser



Laser sensors



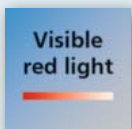
Whole family of laser sensors in a market standard housing with 1" centres

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.
Diffuse reflection sensor with background suppression, 3-wire DC				PNP IO-Link 1.1	NPN
Rectangular 35 x 13 x 21 mm	100	2	2 m, PUR cable	O6H700	O6H703
	100	2	0.3 m PUR cable / M12 connector, 4-pole	O6H701	O6H704
	100	2	M8 connector, 4-pole	O6H702	O6H705
Retro-reflective sensor with polarisation filter, 3-wire DC				PNP IO-Link 1.1	NPN
Rectangular 35 x 13 x 21 mm	300...8000**	< 17	2 m, PUR cable	O6P700	O6P703
	300...8000**	< 17	0.3 m PUR cable / M12 connector, 4-pole	O6P701	O6P704
	300...8000**	< 17	M8 connector, 4-pole	O6P702	O6P705
Through-beam sensor transmitter, DC					
Rectangular 35 x 13 x 21 mm	15000	< 35	2 m, PUR cable	O6S700	
	15000	< 35	0.3 m PUR cable / M12 connector, 4-pole	O6S701	
	15000	< 35	M8 connector, 4-pole	O6S702	
Through-beam sensor receiver, 3-wire DC				PNP IO-Link 1.1	NPN
Rectangular 35 x 13 x 21 mm	15000	–	2 m, PUR cable	O6E700	O6E703
	15000	–	0.3 m PUR cable / M12 connector, 4-pole	O6E701	O6E704
	15000	–	M8 connector, 4-pole	O6E702	O6E705

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

Accessories

Design	Description	Order no.
	Mounting set for clamp mounting, stainless steel, Ø 10 mm	E21272
	Rod, 120 mm, Ø 10 mm, M8 thread, stainless steel	E21081
	USB IO-Link master for parameter setting and analysis of units Supported communication protocols: IO-Link (4.8, 38.4 and 230 kBit/s)	E30390
	LR DEVICE (supplied on USB flash drive) Software for online and offline parameter setting of IO-Link sensors and actuators	QA0011
	Socket, M12, 2 m black, PUR cable	EVC001
	Socket, M12, 5 m black, PUR cable	EVC002
	Socket, M8, 4-pole 2 m black, PUR cable	EVC150
	Socket, M8, 4-pole 5 m black, PUR cable	EVC151

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