



Position sensors and object recognition

The youngest of the opto family: O7 – small, compact, precise.



Powerful photoelectric sensors in a small design. Now also with NPN output.

- Ideal for position detection in feeding and handling.
- Through-beam, retro-reflective and diffuse reflection sensors with fixed setting.
- Visible red light for an easy alignment.
- Diffuse reflection sensor with precise background suppression.
- Small light spot for detecting small objects.

**PLUG
and
PLAY**

Easy-
to-use



Visible
red light

Applications

Whenever there is little space for sensors or when small parts are to be detected, the small photoelectric sensors of the O7 series are the ideal problem solvers. Typical applications are feeding and handling technology. The user can choose between units with PNP or NPN output.

Advantages

The small light spot and the narrow light cone enable the detection of small objects even over long distances. With their fixed setting, the sensors are ready for operation immediately after installation (plug & play). Diffuse reflection sensors with background suppression with 30, 50 or 100 mm range are available. Visible red light allows fast and simple alignment.



fluid sensors
and diagnostic
systems

position
sensors
and object
recognition

bus,
identification
and control systems

Applications:
Handling technology, robotics and automation

System	Range [mm]	Light spot diameter [mm]	Switching frequency [Hz]	Light-on / dark-on mode	Current consumption [mA]	Order no.	Order no.
M8 connector (3 poles) with 200 mm PUR cable · 3-wire DC						NPN	PNP
Diffuse reflection sensor with background suppression	1...30	2.5	750	• / -	20	O7H206	O7H200
	1...30	2.5	750	- / •	20	O7H207	O7H201
Diffuse reflection sensor with background suppression	0...50	2.5	750	• / -	20	O7H208	O7H202
	0...50	2.5	750	- / •	20	O7H209	O7H203
Diffuse reflection sensor with background suppression	0...100	7	750	• / -	20	O7H210	O7H204
	0...100	7	750	- / •	20	O7H211	O7H205
Retro-reflective sensor with polarisation filter	3...1000	55	1000	- / •	20	O7P202	O7P200
	3...1000	55	1000	• / -	20	O7P203	O7P201
Through-beam – transmitter	0...1500	90	-	-	20	-	O7S200
Through-beam – receiver	0...1500	-	1000	- / •	10	O7E202	O7E200
	0...1500	-	1000	• / -	10	O7E203	O7E201

Accessories

Type	Description	Order no.
	Mounting set for clamp mounting, stainless steel	E21237
	Mounting set for free-standing mounting, stainless steel	E21238
	Mounting set for free-standing mounting with fine adjustment, stainless steel	E21239
	Mounting set with ball joint, galvanised, stainless steel	E21240
	Mounting rod, 120 mm, Ø 10 mm, M8 thread, stainless steel	E21081
	Cube for mounting on an aluminium profile, M8 thread, diecast zinc	E20950
	Prismatic reflector 50 x 50 mm, plastics	E20744

Common technical data

		Type O7
Type of light		red light 632 nm
Operating voltage	[V]	10...30 DC
Current rating	[mA]	100
Voltage drop	[V]	< 2.5
Short-circuit protection, pulsed		•
Reverse polarity / overload protection		• / •
Ambient temperature	[°C]	-25...60
Function display		
Switching status	LED	yellow
Materials	housing lens cable	PA PMMA PUR
Protection		IP 65, III

Dimensions

