



Position sensors and object recognition

The ifm opto family is growing: O4 – the big brother of O5.



Photoelectric sensors with long ranges for different industries.

- Diffuse reflection sensors with adjustable background suppression.
- Through-beam sensors and retro-reflective sensors with polarisation filter.
- Quality at an attractive price.
- Universal mounting.
- Optimised system components and wide range of mounting accessories.

IP 67

Easy-to-use

High sensing range

Rotatable connector

Different industries

This all-round photoelectric sensor with its long range is the optimum choice for use in the wood, paper and automotive industries, transport and conveying, as well as in steel processing.

Mounting accessories

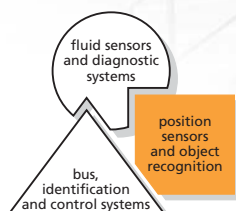
The O4 from the ifm opto family; a reliable sensor even in tough applications. The optional stainless steel bracket protects the sensor in the best possible way against mechanical destruction. The wide selection of mounting accessories enables simple, flexible and time-saving installation.

Variable connection options

The M12 connector which is rotatable by 270° can be aligned in various directions.



Diffuse reflection sensor for the detection of the paper reel thickness in the paper industry.





Applications:

wood, paper and automotive industries, transport and conveying, steel processing

Range [mm]	240° potentiometer	Protection	Switching frequency [Hz]	Light-on / dark-on mode	Current consumption [mA]	Output function	Order no.
Diffuse reflection sensor · red light 624 nm · M12 connector · background suppression · wiring diagram no. 1							
100...2000	•	IP 65, II	1000	• / –	25	PNP	O4H200
Retro-reflective sensor · red light 624 nm · M12 connector · polarisation filter · wiring diagram no. 1							
300...18000	–	IP 67, II	1000	– / •	20	PNP	O4P200
Through-beam sensor · red light 624 nm · M12 connector · transmitter · wiring diagram no. 2							
0...50000	–	IP 67, II	–	– / –	20	–	O4S200
Through-beam sensor · red light 624 nm · M12 connector · receiver · wiring diagram no. 1							
0...50000	–	IP 67, II	1000	– / •	12	PNP	O4E200

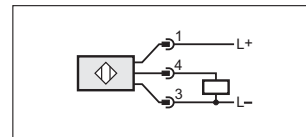
System components

Type	Description	Order no.
	Mounting brackets fixture for the back of the unit	E21116
	Universal angle bracket with hole centres OA, OL and OS	E21117
	Mounting brackets for rods, complete set incl. clamp	E21118
	Protective bracket for rod, complete set incl. clamp	E21119
	Angle bracket for free-standing mounting	E21120
	Dovetail fixing element	E21088
	Fixing element O4 with OC hole centre	E21114
	Wall mounting (dovetail) with OL hole centre	E21122
	Prismatic reflector 50 x 50 mm	E20744
	Prismatic reflector 95 x 95 mm	E20454

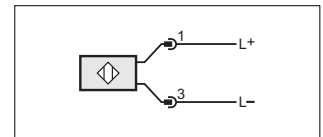
Common technical data

Operating voltage	[V]	10...36 DC
Current rating	[mA]	200
Voltage drop	[V]	< 2.5
Short-circuit protection, pulsed		•
Reverse polarity / overload protection		• / •
Operating temperature	[°C]	-25...60
Material	housing	PA
	operator interface	TP
	bezel / protective bracket	stainless steel

Wiring diagrams of the units



Wiring diagram no. 1



Wiring diagram no. 2

Connectors and splitter boxes

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

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