

OY400320

Optical sensors • Light receivers

Sensor Optical, light receiver, 42x84x40mm, 10-30V DC, PNP programmable/configurable, M12 plug-in connector 4-pin, IP65, aluminum



Optical sensors function contactlessly. They detect objects independent of their characteristics (e.g., shape, color, surface structure, material). The basic operating principle is based on the transmission and reception of light. There are three different versions: 1. The through-beam sensor consists of two separate devices, a transmitter and a receiver that are aligned with one another. If the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. With the retro-reflective sensor, the transmitter and receiver are located in one device. The emitted light beam is reflected back to the receiver by a reflector that is to be mounted opposite the device. As soon as the light beam is interrupted, the switching output integrated in the device changes its status. 3. With the diffuse reflection sensor, the transmitter and receiver are in one device. The emitted light beam is reflected by the object that is to be detected. As soon as the receiver detects the reflected light, the switching output integrated in the device changes its status.

Electrical features

Display	LED display
Type of switching function	Programmable/configurable
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	200 mA
Setting procedure	Manual adjustment
Short-circuit protection	Yes
No-load current	20 mA
Number of pins	4
Switching frequency	1000 Hz
Voltage drop	3 V
Scanning function	Light-/dark-on mode
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30 V

Mechanical features

Design	Cuboid
Width	40 mm
Height	42 mm
Length	83.5 mm
Degree of protection (IP)	IP65
Housing material	Aluminum
Ambient temperature	-10 - 60 °C

Other features

Version	Light receiver
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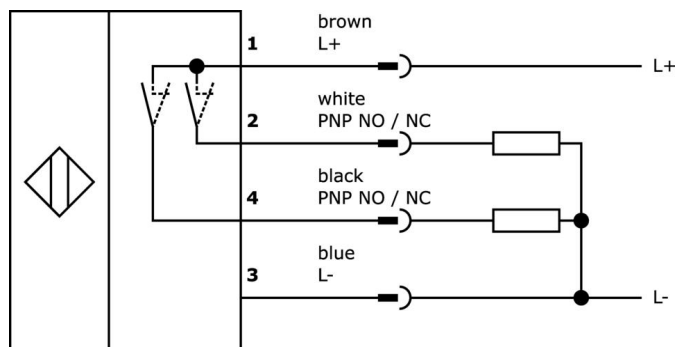
Classification

ETIM 8	EC002716 Through-beam photoelectric sensor
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More

IPF Product Group	100 optical sensors
packaging dimensions	105 x 43 x 43 mm
gross weight	193 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Extract accessories program

VK000041



Adaption, M12 Female (socket)
4pin Straight, M8 Male
(connector) 4pin Straight, 24V, -
25-85°C, IP67, Oil and cooling
lubricants, Welding area

LT030000



fiber optic diffuse-reflection
sensor, 0.3m, head: Stainless steel
25long Ø1 Ø6, Light exit Axial,
conductor: Glassfiber+Silicone,
end piece: M18x1 Brass, Sn: 5, -
40-180°C, IP67

LT030101



fiber optic diffuse-reflection
sensor, 0.3m, head: Stainless steel
25long Ø1.5 Ø6, Light exit Axial,
conductor: Glassfiber+Silicone,
end piece: M18x1 Brass, Sn: 15, -
40-180°C, IP67

VK003020



Cable socket, angular, self-
assembly, screw connection, Ø3-6.
5mm, 4A, 240V, -25-90°C, M12
socket 4-pin, IP67, PBT

VK003024



Cable socket, Straight, Suitable for
self-assembly, Screw connection,
Ø3-6.5mm, 4A, 240V, -25-90°C,
M12 Female (socket) 4pin, IP67,
PBT

AY98A877



accessories sensor, Teflon cap,
M18 10long,
Polytetrafluorethylene (PTFE)

AY98C898



accessories sensor, Teflon cap,
M18x1 15long,
Polytetrafluorethylene (PTFE)

AY98A607



accessories sensor, Teflon cap,
Ø16mm 16long, inner thread 12,
Polytetrafluorethylene (PTFE)

VK200321



Connection cable, 2m, M12
Female (socket) 4pin Angular, Free
conductor end, 4x0.34mm², PUR
(Polyurethane), Ø4.7mm, 250V, -
40-90°C, IP67, Suitable for trailing
chain and torsion resistant, Oil and
cooling lubricants, Welding area,
Silicone-free

You can find further accessories on our homepage



Installation

Mounting / installation may only be carried
out by a qualified electrician!



Disposal

WEEE number according to § 6 para. 3
ElektroG: 40951076

Safety warnings

/ Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

/ Never use these devices in applications where the safety of a person depends on their functionality.