

OS150070

Optical sensors • Through-beam sensors transmitters

Sensor Optical, through-beam sensor transmitter, 30x30x15mm, Sn: 12m, 10-35V DC, M8 connector 4-pin, IP67, PBTP+glass, infrared light

including Mounting bracket, Nut, Screw, Washer



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

Type of electrical connection	Connector M8
No-load current	15 mA
No-load current, transmitter	15 mA
Number of pins	4
Residual ripple	20 %
Switching distance	0 - 12000 mm
Clock frequency of the transmitter	15 kHz
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 35 V

Mechanical features

Design	Cuboid
Width	15 mm
Height	30 mm
Length	30 mm
Degree of protection (IP)	IP67
Active area material of sensor	glass
Housing material	PBT
Ambient temperature	-25 - 55 °C

Optical features

Light source	Infrared light
Light beam form	Point
Wavelength of the sensor	880 nm

Other features

Features	with test input
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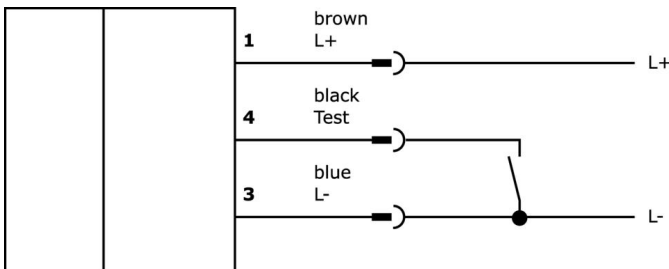
Classification

ETIM 8	EC002716 Through-beam photoelectric sensor
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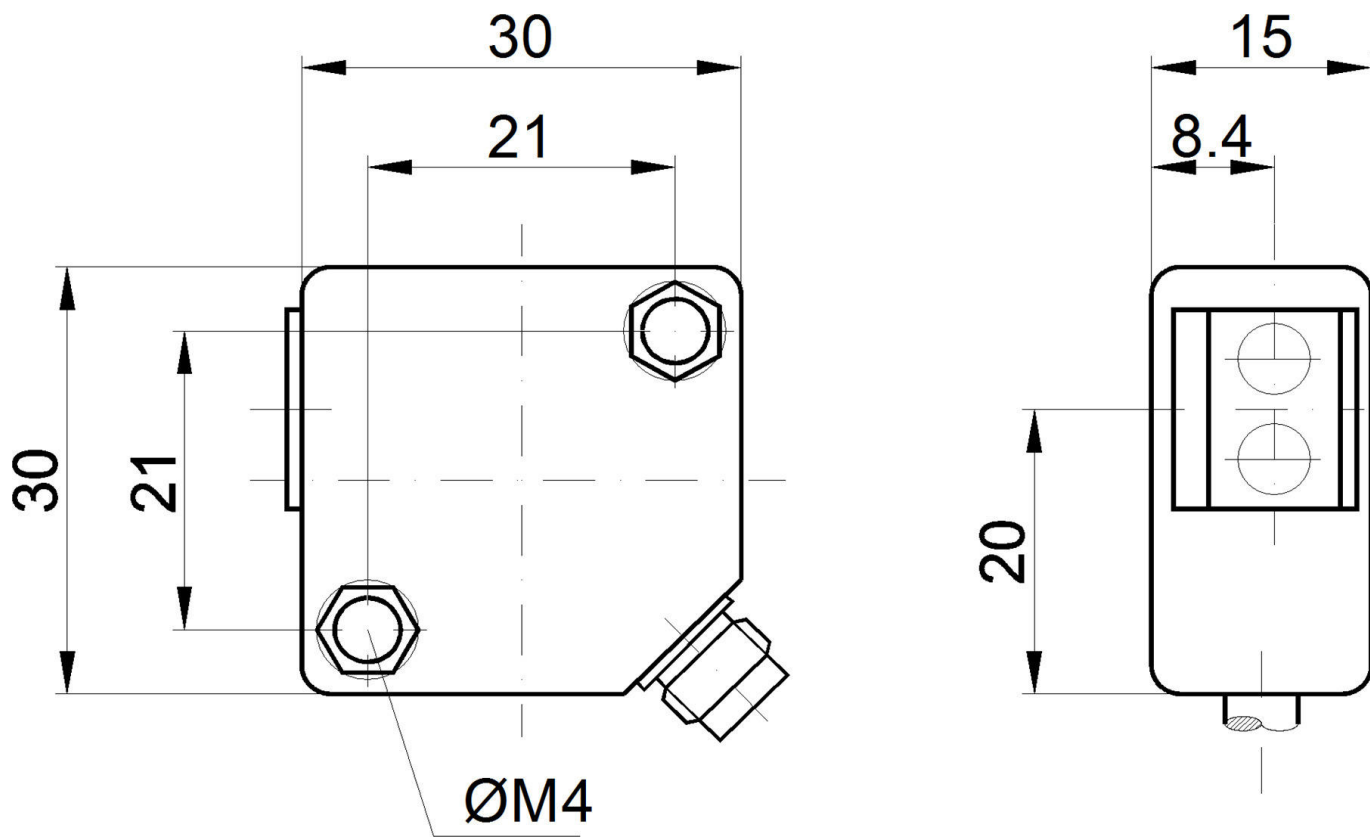
More

IPF Product Group	100 optical sensors
packaging dimensions	210 x 185 x 15 mm
gross weight	45 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

AO000293



accessories optical, Infrared spotfinder, Plastic, With LED display, Signal tone

VK030F81



Connection cable, 0.3m, M8 socket 4-pin angular, M12 connector 4-pin straight, 4x0.34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK030F85



Connection cable, 0.3m, M8 socket 4-pin straight, M12 connector 4-pin straight, 4x0.34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK003071



Cable socket, Angular, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 30V, -40-85°C, M8 Female (socket) 4pin, IP67, Brass

VK003075



Cable socket, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 30V, -40-85°C, M8 Female (socket) 4pin, IP67, Brass

VK200371



Connection cable, 2m, M8 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø4.7mm, 30V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK200375



Connection cable, 2m, M8 Female (socket) 4pin Straight, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø4.7mm, 30V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

AY000114



accessories sensor, Fixture kit, Metal, ball joint

AY000162



Accessories, magnetic, Ø43mm, neodymium-iron-boron, inside thread M5, rubber

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.