

OS140076

Optical sensors • Through-beam sensors transmitters

sensor optical, Through-beam sensor transmitter, 34x14x12mm, Sn: 5m, 10-30V DC, Connector M8 4pin, IP67, Plastic ASA+PMMA, Polarity free red light



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	23 mA
No-load current, transmitter	23 mA
Number of pins	4
Switching distance	0 - 5000 mm
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30 V

Mechanical features

Design	Cuboid
Width	12 mm
Height	33.7 mm
Length	14 mm
Maximum tightening torque	0.5 Nm
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PMMA)
Housing material	Plastic ASA
Ambient temperature	-25 - 65 °C

Optical features

Light source	Polarity free red light
Light beam form	Point
Wavelength of the sensor	660 nm

Other features

Features	with test input
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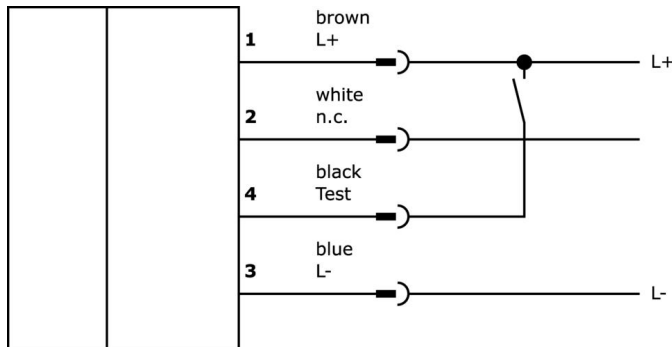
Classification

ETIM 8	EC002716 Through-beam photoelectric sensor
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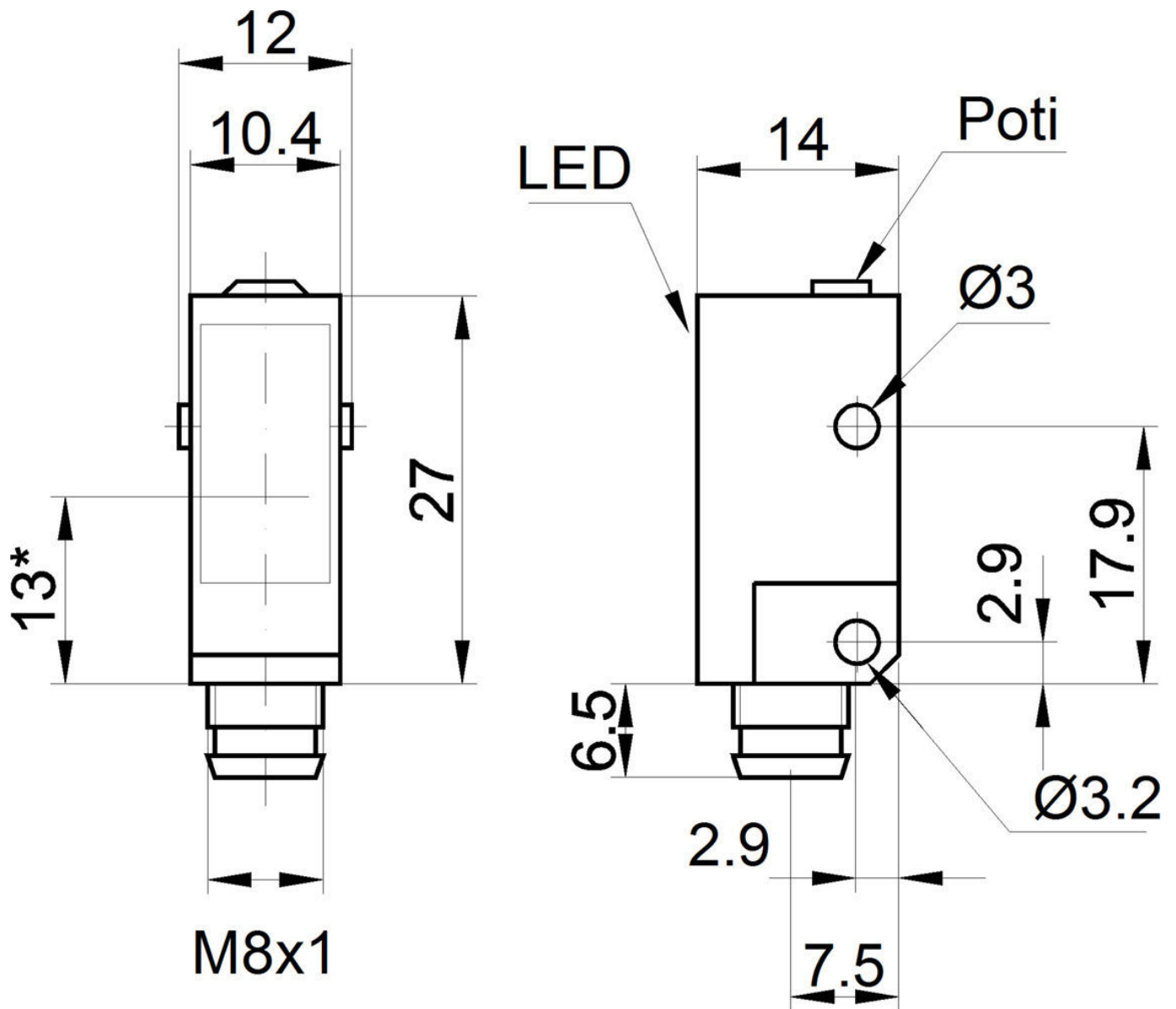
More

IPF Product Group	100 optical sensors
packaging dimensions	123 x 77 x 25 mm
gross weight	15 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



* Sender- Empfängerachse
 Sender ohne LED und Poti

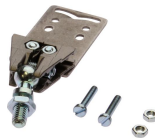
Extract accessories program

AO000073



accessories optical, Mounting angle bracket, 22x11x27mm, Mounting material for sensor, brackets, Steel

AY000116



accessories sensor, Fixture kit, Metal, ball joint

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

VK030F71



Connection cable, 0.3m, M8 socket 4-pin angular, M8 connector 4-pin straight, 4-core, PUR (polyurethane), suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK030F75



Connection cable, 0.3m, M8 socket 4-pin straight, M8 connector 4-pin straight, 4-core, PUR (polyurethane), suitable for trailing chain and torsion-resistant, oils and cooling lubricants, welding area, silicone-free

AY000162



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

AY98C293



accessories sensor, Teflon cap, M8x1 5long, Polytetrafluorethylene (PTFE)

OE140170



sensor optical, Through-beam sensor receiver, 27x14x12mm, Sn: 5m, 10-30V DC, PNP NO (NO), Cable connector M8 3pin 0.2m PVC, IP65, Plastic ASA+PMMA, Polarity free red light

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.