

OS150075

Optical sensors • Through-beam sensors transmitters

Sensor Optical, through-beam sensor transmitter, 30x30x15mm, Sn: 6m, 10-35V DC, M8 connector 3-pin, IP65, PBTP+glass, infrared 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	15 mA
No-load current, transmitter	15 mA
Number of pins	3
Residual ripple	20 %
Switching distance	0 - 6000 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)	IP65
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

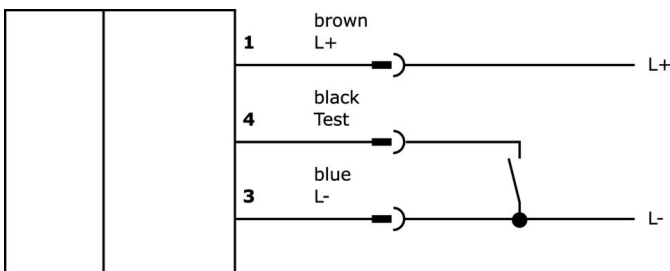
Features	with test input
----------	-----------------

Classification

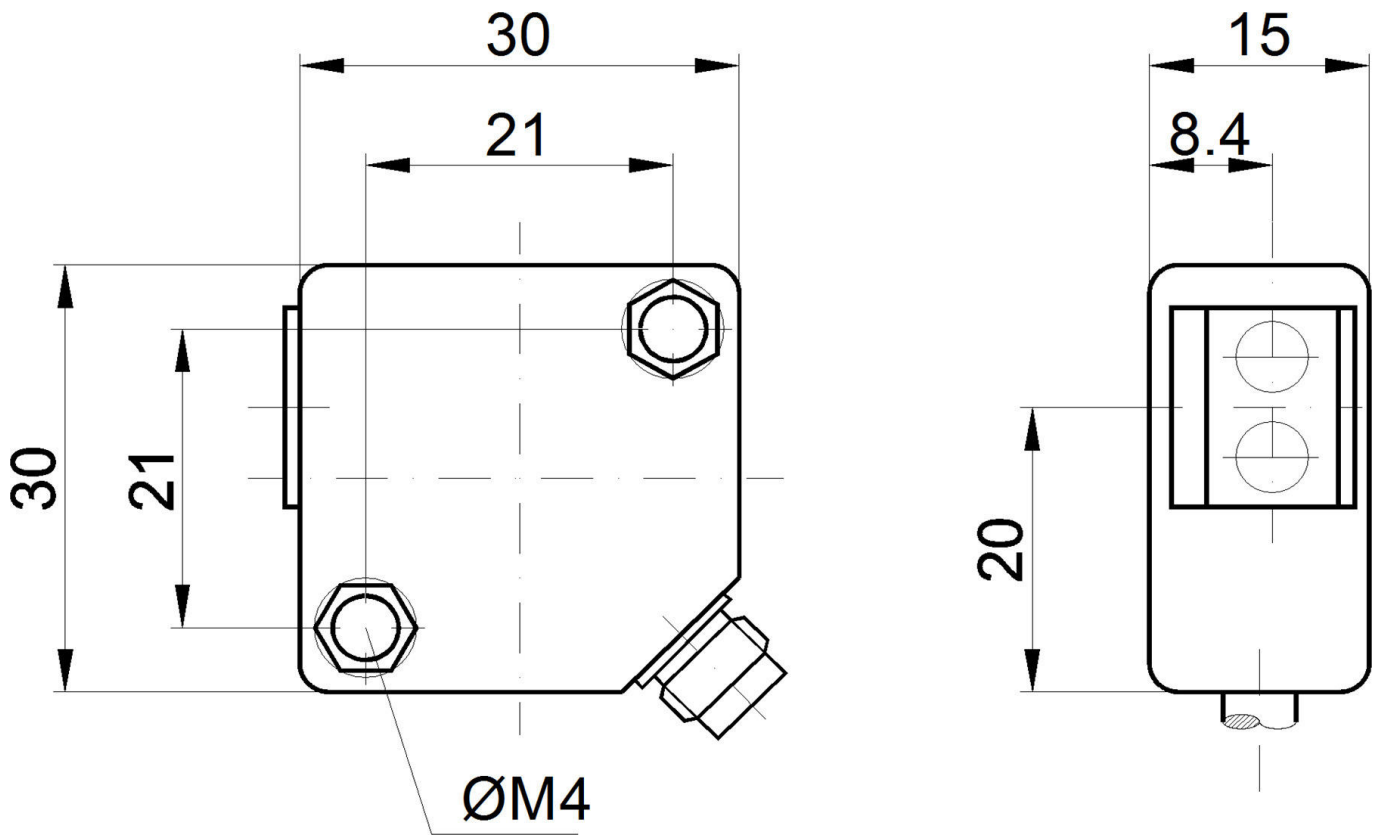
ETIM 8	EC002716 Through-beam photoelectric sensor
--------	--

More

IPF Product Group	100 optical sensors
packaging dimensions	210 x 180 x 15 mm
gross weight	24 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes


Connection

Dimensional drawing




Extract accessories program

VK030F70




Connection cable, 0.3m, M8 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK030F74




Connection cable, 0.3m, M8 socket 3-pin straight, M8 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK030F82




Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK060F82




Connection cable, 0.6m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

OE150175



Sensor Optical, through-beam sensor receiver, 30x30x15mm, Sn: 6m, 10-35V DC, PNP NO, M8 connector, IP65, PBTP+glass, infrared light

OE150275




Sensor Optical, through-beam sensor receiver, 30x30x15mm, Sn: 6m, 10-35V DC, PNP NC, M8 connector, IP65, PBTP+glass, infrared light

VK003070




Cable socket, Angular, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass

VK003074



Cable socket, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass

VK030F72



Connection cable, 0.3m, M8 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils 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.