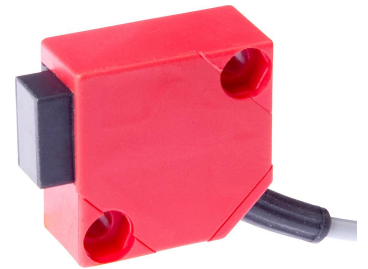


OR150105

Optical sensors • Retro-reflective sensors

Sensor Optical, reflex, 30x30x15mm, red light polarized, point, manual setting, Sn: 200-2000, 10-35V DC, PNP NO, cable 2m PVC, IP65, PBTP+glass, With polarizing filter



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

Response/decay time	0.5 ms
Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable
Type of switching output	PNP
Rated switching current	200 mA
Readiness delay	100 ms
Setting procedure	Potentiometer
Short-circuit protection	Yes
No-load current	15 mA
Residual ripple	20 %
Switching distance	200 - 2000 mm
Switching frequency	1000 Hz
Voltage drop	2 V
Clock frequency of the transmitter	15 kHz
Scanning function	Dark switching
Reverse polarity protection	Yes
Decay time	0.5 ms
Operating voltage (DC)	10 - 35 V
With polarizing filter	Yes
Output functions	Switching point

Mechanical features

Number of cores	3
Conductor cross-section	0.14 mm ²
Design	Cuboid
Width	15 mm
Height	30 mm
Cable length	2 m
Length	30 mm
Degree of protection (IP)	IP65
Active area material of sensor	glass
Housing material	PBT
Material of cable sheath	Plastic (PVC)
Ambient temperature	-25 - 65 °C

Optical features

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

Other features

Reference medium / object	AO000007
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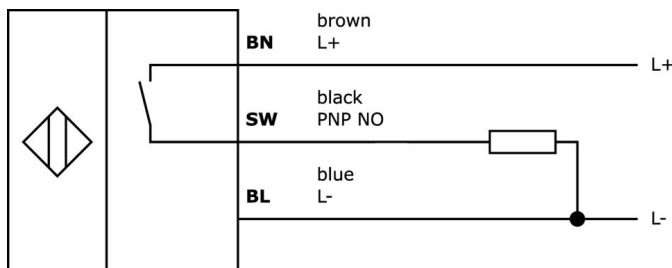
Classification

ETIM 8	EC002717 Retro-reflective sensor
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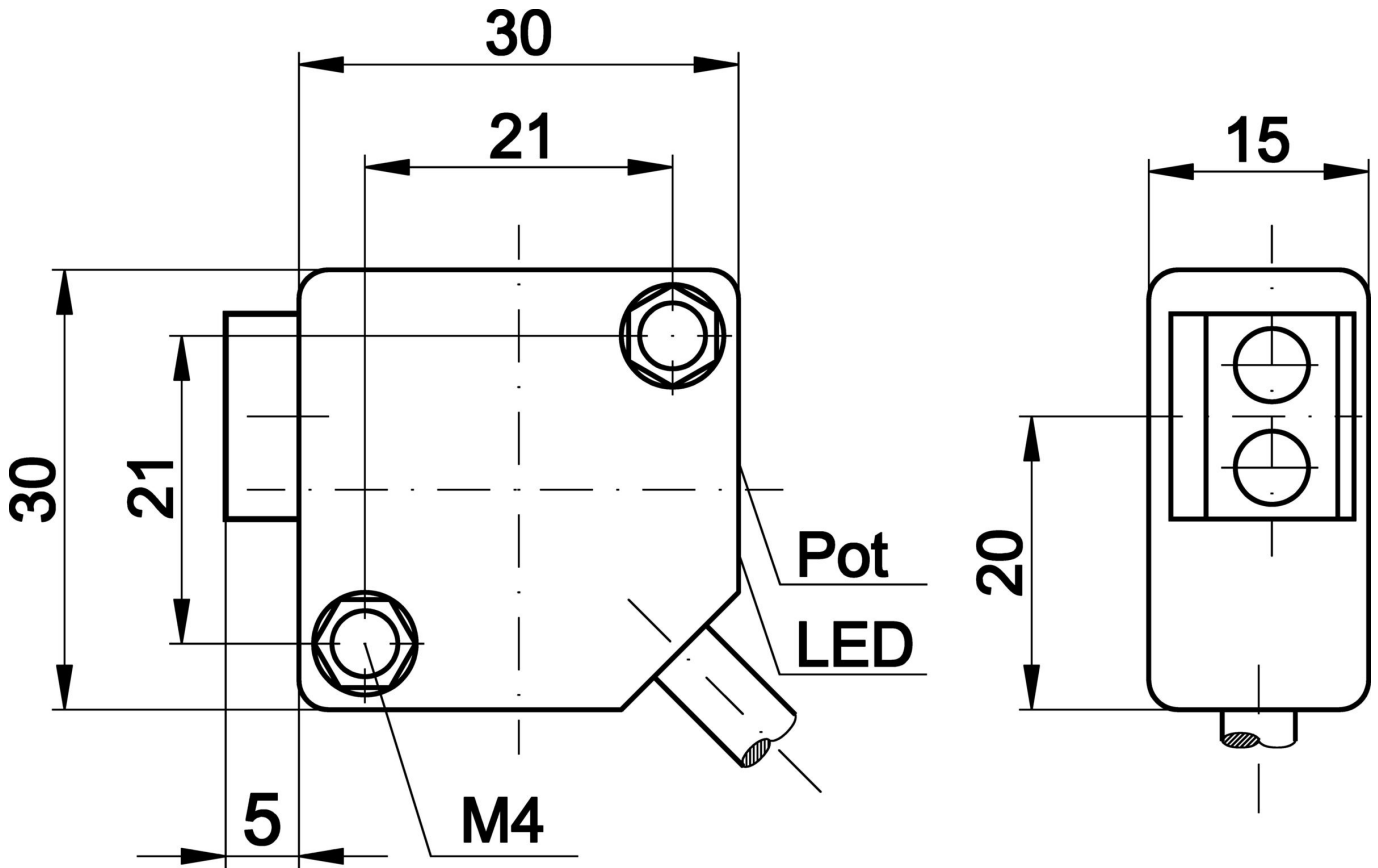
More

IPF Product Group	100 optical sensors
packaging dimensions	215 x 180 x 15 mm
gross weight	70 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

AO000045



accessories optical, Mounting angle bracket, 16x15x42mm, Mounting material for sensor, brackets, Steel, 90°

AY000114



accessories sensor, Fixture kit, Metal, ball joint

VK003076



Cable connector, Angular, Suitable for self-assembly, Soldering connection, 4A, 60V, -40-85°C, M8 Male (connector) 3pin, IP67, Brass

VK003078



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

VK003026



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

VK003028



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

AY000141



Plastic sheath, Ø17mm, Inner diameter 10mm, -40-250°C, Glass fiber with silicone rubber, Short-term resistance to weld spatter 1200°C, Tensile strength 400N, Flexible, Flame retardant, yard good

AY000162



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

AO000004



accessories optical, reflector, Ø20mm 6high, Self-adhesive, PMMA+PMMA, Polarized

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.