

OR270478

Optical sensors • Retro-reflective sensors

sensor optical, reflective, 37x21x10mm, Other, Point, Teach-In, Sn: 1200, 15-30V DC, PNP Anticoincidence, IO-Link, Connector M8 4pin, IP67, Plastic ABS+PMMA, With polarizing filter, For transparent objects



Detection of transparent materials

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	Exclusive-OR
Type of electrical connection	Connector M8
Type of switching output	PNP
Rated switching current	100 mA
Readiness delay	50 ms
Setting procedure	Teach-In
Short-circuit protection	Yes
No-load current	15 mA
Number of pins	4
Residual ripple	10 %
Switching distance	0 - 1200 mm
Switching frequency	1000 Hz
Scanning function	Light-/dark-on mode
Reverse polarity protection	Yes
Decay time	0.5 ms
Supported communication interface	IO-Link
Operating voltage (DC)	15 - 30 V
With polarizing filter	Yes
Output functions	Switching point

Mechanical features

Design	Cuboid
Width	10 mm
Height	37 mm
Length	21.1 mm
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PMMA)
Housing material	Plastic (ABS)
Transparent material detection	Yes
Ambient temperature	-25 - 55 °C

Optical features

Light source	other
Light beam form	Point
Wavelength of the sensor	275 nm
Light spot diameter at focal point	5.5 mm

Other features

IO-Link version	V1.0.1
Reference medium / object	A0000007

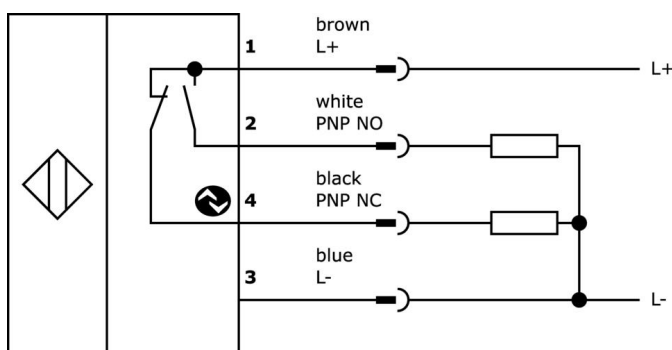
Classification

ETIM 8	EC002717 Retro-reflective sensor
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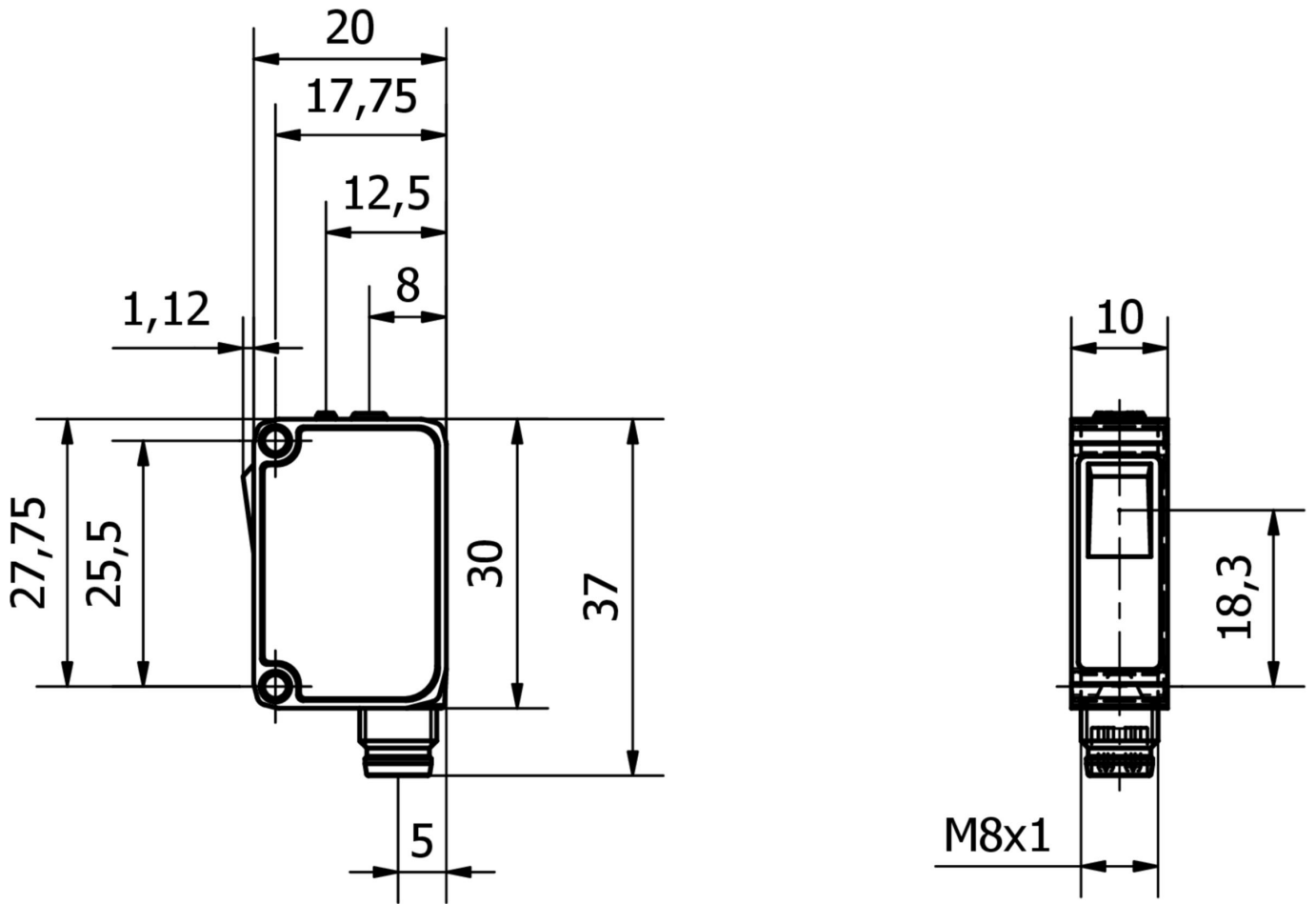
More

IPF Product Group	100 optical sensors
packaging dimensions	210 x 180 x 15 mm
gross weight	22 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

VK205375



Connection cable, 2m, M8 Female (socket) 4pin Straight, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø5.5mm, 60V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-..

VK505371



Connection cable, 5m, M8 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø5.5mm, 60V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-..

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

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

VK030F73



Connection cable, 0.3m, M8 socket 4-pin angular, M8 connector 4-pin straight, 4x0.34mm², PUR (polyurethane) black, 24V, -30-90°C, IP67, TPU, 3A, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding range, silicone-free

VK060F73



Connection cable, 0.6m, M8 socket 4-pin angular, M8 connector 4-pin straight, 4x0.34mm², PUR (polyurethane) black, 24V, -30-90°C, IP67, TPU, 3A, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding range, silicone-free

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

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.

/ Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com