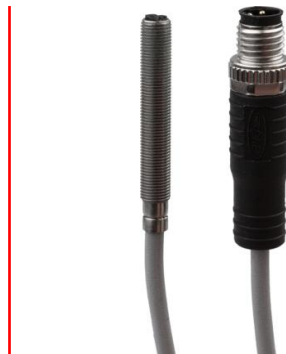


OS050075

Optical sensors • Through-beam sensors transmitters

Sensor Optical, through-beam sensor Transmitter, M5x0.5 36lang, Sn: 0.5m, 10-30V DC, IO-Link, M8 cable connector 3-pin 0.3m PUR (polyurethane), IP67, V2A+PMMA, red light unpolarized

including Nut, Toothed 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	Cable connector M8
No-load current	8 mA
No-load current, transmitter	8 mA
Number of pins	3
Residual ripple	10 %
Switching distance	0 - 500 mm
Reverse polarity protection	Yes
Supported communication interface	IO-Link
Operating voltage (DC)	10 - 30 V

Mechanical features

Conductor cross-section	0.14 mm ²
Design	Cylinder, screw-thread
Thread length	30 mm
Thread pitch	0.5 mm
Cable length	0.3 m
Length	36 mm
Maximum tightening torque	1 Nm
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PMMA)
Housing material	Stainless steel (V2A)
Material of cable sheath	Plastic (PUR)
Thread dimension	M5
Ambient temperature	-25 - 65 °C

Optical features

Light source	Polarity free red light
Light beam form	Point
Wavelength of the sensor	630 nm
Angle of beam spread	15 °

Other features

IO-Link version	V1.0.1
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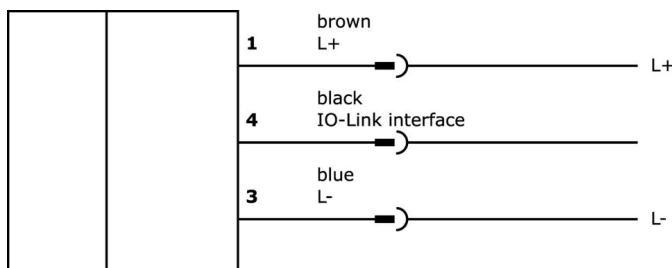
Classification

ETIM 8	EC002716 Through-beam photoelectric sensor
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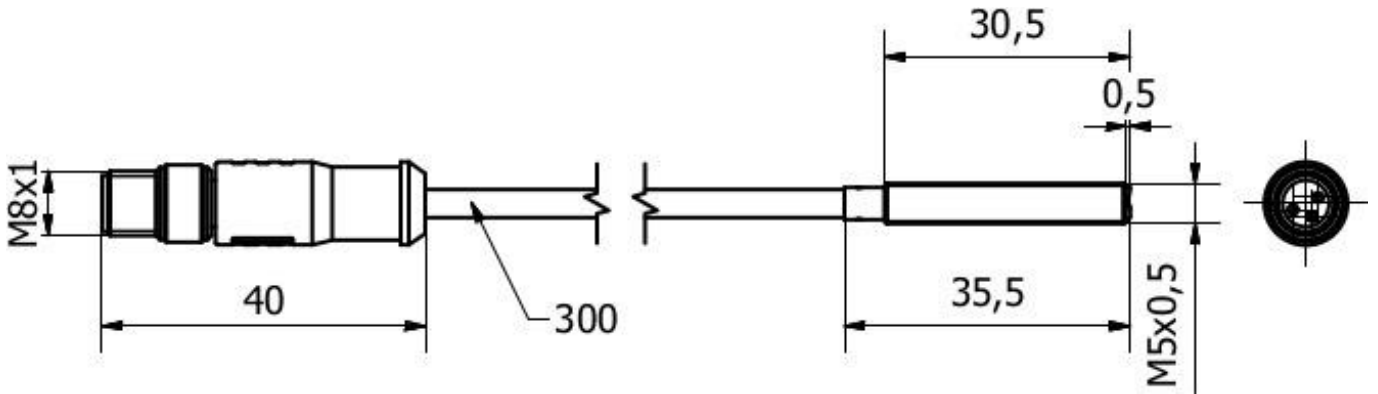
More

IPF Product Group	100 optical sensors
packaging dimensions	210 x 180 x 10 mm
gross weight	22 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

AY98C293



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

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

AV000142



accessories cable socket, Mounting clip, 8.5mm, PPO, Packaging unit 5, Accessories for Cable socket/connector M8

VY000005



IO-Link master, 41x24x67mm, IO-Link, M12, With USB interface

OE050175



Sensor Optical, through-beam sensor Receiver, M5x0.5 36lang, Sn: 0.5m, 10-30V DC, PNP NO, IO-Link, M8 cable connector 3-pin 0.3m PUR (polyurethane), IP67, V2A+PMMA, red light unpolarized

VK000038



Adaption, M8 Female (socket) 3pin Straight, M8 Male (connector) 4pin Straight, 24V, -25-85°C, IP67, Oil and cooling lubricants, Welding area

VK000036



Adaption, M8 Female (socket) 3pin Straight, M12 Male (connector) 3pin Straight, 24V, -25-85°C, IP67, Oil and cooling lubricants, Welding area

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

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