

## OS106003

### High performance light barriers • Transmitter unamplified

High-power photoelectric sensor transmitter, Ø10mm 45long, normal power (40mW), 12°, connection to amplifier, cable tail 15m PVC, IP67, plastic+plastic



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
Power	0.04 W
Connection to amplifier	Yes

#### Mechanical features

Number of cores	2
Conductor cross-section	0.34 mm <sup>2</sup>
Design	Cylinder plain
Diameter	10 mm
Cable length	15 m
Storage temperature	-40 - 80 °C
Length	45 mm
Shock resistance	30 g
Degree of protection (IP)	IP67
Vibration resistance	55 Hz
Active area material of sensor	Plastic
Housing material	Plastic
Material of cable sheath	Plastic (PVC)
Ambient temperature	-25 - 60 °C
Line diameter	3.8 mm

**Optical features**

Light source	Infrared light
Light beam form	Point
Transmitting power	Normal power (40mW)
Wavelength of the sensor	880 nm
Angle of beam spread	12 °

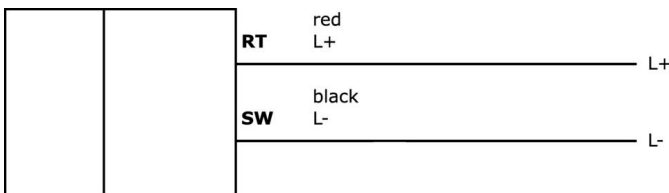
**Classification**

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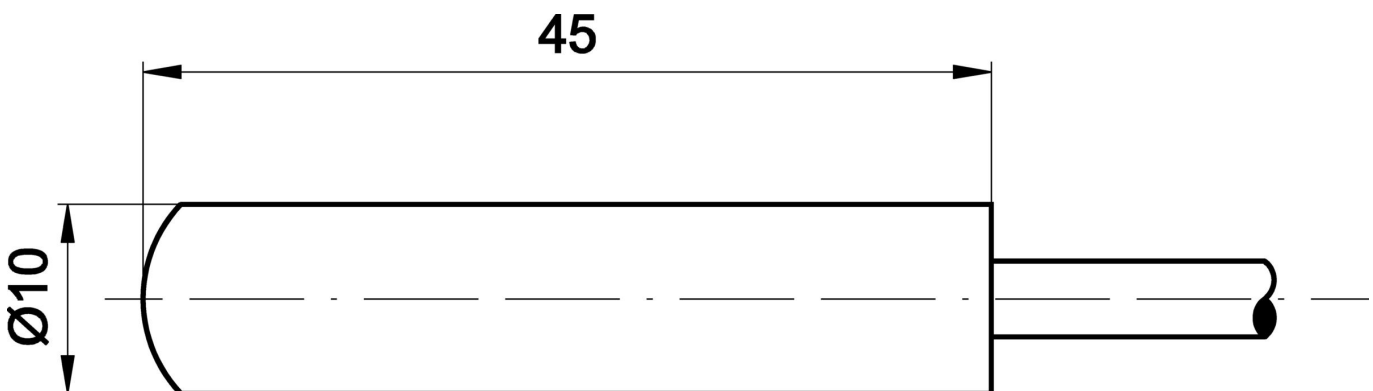
**More**

IPF Product Group	101 high performance through-beam sensors and amplifiers
packaging dimensions	180 x 102 x 50 mm
gross weight	350 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



**Dimensional drawing**



**Extract accessories program**

**AO000293**



accessories optical, Infrared spotfinder, Plastic, With LED display, Signal tone

**AY000004**



accessories sensor, Ø10mm, Plastic, For sensor 10mm, for Wall mounting, Screw mounting

**AY000020**



accessories sensor, Ø10mm, Aluminum, For sensor 10mm, for Wall mounting, Screw mounting

**OE106001**



High-power photoelectric sensor receiver, Ø10mm 45long, standard design, connection to amplifier, cable tail 2-pin 5m PVC, IP67, plastic+plastic

**OE106003**



High-performance photoelectric sensor receiver, Ø10mm 45long, standard design, connection to amplifier, 2-pin cable tail 15m PVC, IP67, plastic+plastic

**OV580080**



High-power photoelectric sensor amplifier, 76x78x40mm, 24V, NO/NC, 0-10V, plug connection 11-pin, IP40, plastic

**OV580510**



High-power photoelectric sensor amplifier, 76x78x40mm, 24V, PNP/NPN NO/NC, 11-pin plug connection, IP40, plastic, fault signal output

**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

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.