OE126003

High performance light barriers ● Receiver unamplified

High-power photoelectric sensor receiver, M12x1 45long, standard design, connection to amplifier, 2-pin PVC cable 15m, IP67, nickel-plated (n-pltd) brass+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
Switching distance	0 - 70000 mm
Switching frequency	15 Hz
Connection to amplifier	Yes

Mechanical features

Number of cores	2
Conductor cross-section	0.5 mm²
Design	Cylinder, screw-thread
Receiver design	Normal design
Thread length	26 mm
Thread pitch	1 mm
Cable length	15 m
Storage temperature	-40 - 80 °C
Length	45 mm
Surface	nickel-plated
Shock resistance	30 g
Degree of protection (IP)	IP67
Vibration resistance	55 Hz
Active area material of sensor	Plastic
Housing material	Brass
Material of cable sheath	Plastic (PVC)
Thread dimension	M12
Ambient temperature	-25 - 60 °C
Line diameter	3.8 mm

Optical features

Light source	Infrared light
Light beam form	Point
Wavelength of the sensor	880 nm
Angle of beam spread	25 °

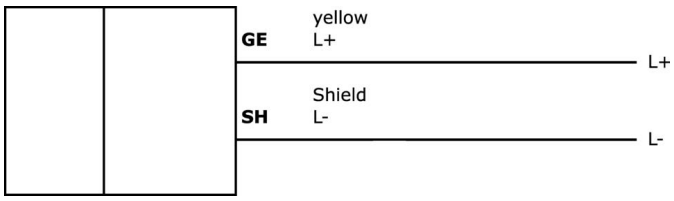
Classification

ETIM 8	EC002716 Through-beam photoelectric sensor

More

IPF Product Group	101 high performance through-beam sensors and amplifiers
packaging dimensions	180 x 100 x 50 mm
gross weight	390 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Extract accessories program

AY000115

accessories sensor, Fixture kit, Metal, ball joint

AY000162

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

AY000159

accessories sensor, Mounting pipe, Ø12mm 200long, Aluminum Anodised

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

LS100916

fiber optic barrier, 1m, head: Stainless steel 29long Ø6 Ø9, Light exit Axial, conductor: Glassfiber+Silicone, end piece: M12x1 Brass, -40-180°C

LS102911

fiber optic barrier, 1m, head: Stainless steel 37long Ø4 Ø8, Light exit Axial, conductor: Glassfiber+Stainless steel, end piece: M12x1 Brass, -40-300°C

AY000025

accessories, Hexagon nut, M12x1, Wrench size 17mm, Brass Nickel-plated

AY000032

accessories sensor, Ø12mm, Aluminum, For sensor 12mm, for Wall mounting, Screw mounting

AO000095

accessories optical, Cleaning air nozzle, Metal

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.