

OE126003**HIGH-PERFORMANCE THROUGH-BEAM SENSORS • THROUGH-BEAM SENSORS RECEIVERS**

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.

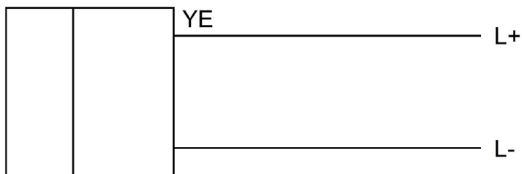
**TECHNICAL DATA**

Ambient temperature	-25 °C ... 60 °C
Angle of beam spread	25 °
Cable length	15 m
Connection to amplifier	Yes
Degree of protection (IP)	IP67
Function test	No
Heavy-duty devices	Yes
Housing coating	Nickel-plated
Housing design	Cylinder, screw-thread
Housing material	Brass
Increased ambient temperatures >70°C	No
Input (TeachIn)	No
Input voltage	0 V
Light beam form	Point
Light source	Infrared light
Material of cable sheath	PVC
Material of optical surface	Plastic
No-load current, receiver	0 mA
Number of wires	2
Rated switching distance	0 mm
Reverse polarity protection	No
Scope of delivery of the one-way system	Receiver
Sensor length	45 mm
Shock resistance	30 G
Short-circuit-proof	No
Storage temperature	80 °C
Storage temperature	-40 °C

TECHNICAL DATA

Switching frequency	15 Hz
Thread length	26 mm
Thread pitch	1 mm
Thread size, metric	12
Type of electrical connection	Cable
Type of input voltage	DC
Vibration resistance	55 Hz
Voltage type	DC
Wavelength of the sensor	880 nm
Wire cross section	0.5 mm ²
With time function	No

CONNECTION



Colors: YE (yellow), shield

Functions: YE = L+, shield = L-

DIMENSIONAL DRAWING

INSTALLATION



Mounting / Installation may only be carried out by a qualified electrician!

DISPOSAL



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.

