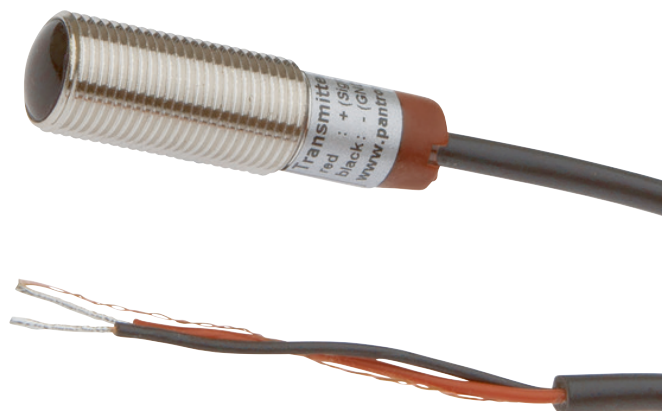


**OS12C438**

**SAFETY SYSTEMS • THROUGH-BEAM SENSORS TRANSMITTERS**

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.



**MECHANICAL DATA**

Ambient temperature (MAX)	60 °C
Ambient temperature (MIN)	-20 °C
Cable length	15 m
Degree of protection (IP)	IP67
Housing coating	Nickel-plated
Housing design	Cylinder, screw-thread
Housing material	Brass
Material of cable sheath	PVC
Number of wires	2
Sensor length	45 mm
Storage temperature	80 °C
Storage temperature	-40 °C
Thread pitch	1 mm
Thread size, metric	12
Wire cross section	0.34 mm <sup>2</sup>

**ELECTRICAL DATA**

Connection to amplifier	Yes
Measuring range	25 m
Rated switching distance	25000 mm
Type of electrical connection	Cable
With time function	No

**OPTICAL DATA**

Angle of beam spread	5 °
Light beam form	Point
Light source	Infrared light
Wavelength of the sensor	880 nm

**OTHER DATA**

Heavy-duty devices

Yes

Scope of delivery of the one-way system

Transmitter

**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.