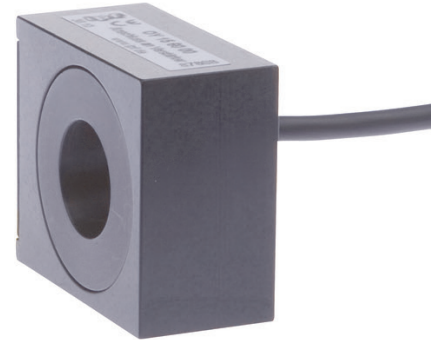


OY156000

OPTICAL SENSORS • RING LIGHT BARRIERS

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)	50 °C
Ambient temperature (MIN)	0 °C
Cable length	0.5 m
Housing coating	Anodised
Housing design	Ring-shaped
Housing material	Aluminium
Reflector included in the scope of delivery	No
Sensor diameter	15.6 mm
Sensor height	35 mm
Sensor length	20 mm
Sensor width	40 mm

ELECTRICAL DATA

Connection to amplifier	Yes
No-load current	60 mA
Rated switching distance	0 mm
Setting procedure	Manual adjustment
Type of electrical connection	Cable
With time function	No

OPTICAL DATA

Light source	Infrared light
Resolution	2000 µm
Wavelength of the sensor	880 nm

