high performance through-beam sensors and amplifiers

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

Scope of delivery of the one-way system	Receiver
Ambient temperature (min/max)	-25 °C / 60 °C
Degree of protection (IP)	IP67
Housing design	Cylinder, screw-thread
Housing material	Stainless steel
Increased ambient temperatures >70°C	NO
Material of optical surface	Plastic
Sensor length	55 mm
Shock resistance	30 G
Storage temperature	80 °C
Storage temperature	-40 °C
Thread length	36 mm
Thread pitch	1 mm
Thread size, metric	12
Vibration resistance	55 Hz
Connection to amplifier	YES
Function test	NO
Input (TeachIn)	NO
Input voltage	0 V
No-load current, receiver	0 mA
Number of pins	3
Rated switching distance	0 mm
Reverse polarity protection	NO
Short-circuit-proof	NO
Switching frequency	15 Hz
Type of electrical connection	Connector M12
Type of input voltage	DC
Voltage type	DC

OE126020

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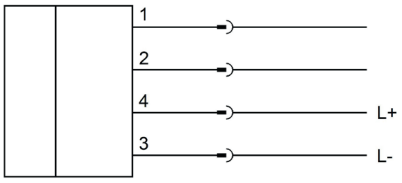
TECHNICAL DATA

With time function	NO
Heavy-duty devices	YES
Angle of beam spread	25 °
Light beam form	Point
Light source	Infrared light
Wavelength of the sensor	880 nm

CONNECTION



Colors: 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)
Functions: 1 = n. c., 2 = n. c., 3 = L-, 4 = L+

DIMENSIONAL DRAWING