

OS / OE16 - Series

Through-beam sensors

Installation and environment

Coatings on the optics impair the function and reduce the range. The installation should therefore be carried out in such a way that as little dust as possible is deposited and no liquid can get onto them during operation. It must also be ensured that they are accessible for cleaning.

From time to time, the optics should be cleaned with a soft cloth moistened with soapy water.

There must be no highly specular objects in the immediate vicinity parallel to the optical axis. An object must cover the lenses of the receiver and transmitter in order to be recognized.

Cable

The PVC connection cable of the pre-wired cable devices is not suitable for environments containing oil or solvents and in applications where the cable is frequently moved.

In such cases, the use of plug devices with a PUR cable socket is recommended.

Installation and alignment

1. First, mount the receiver (OE) in the desired position.
2. Then temporarily mount the transmitter (OS) in its position.
3. The optical axis of the transmitter must now be aligned on that of the receiver.
4. Finally mount the transmitter.
5. If the light beam is interrupted, the switching output of the receiver must now switch safely.

Setting

Safe operation is ensured when the yellow LED lights up when the light path is free and goes out when the output is switched.

If the yellow LED flashes, either the range is set too low or the optics are dirty.

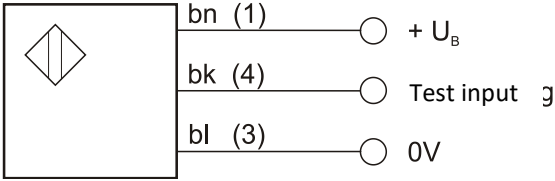
The device then operates without sufficient performance reserve.

The transmitter has a test input. If the black line is connected to the brown one (+U_B), the transmitter diode is switched off. At the same time the switching state of the receiver must change. If this is not the case, either the receiver is defective or it is influenced by very strong extraneous light.

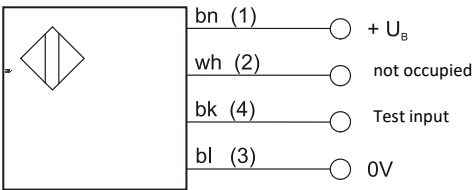
In standard mode, the test input must always be connected to 0V.

Electrical connection

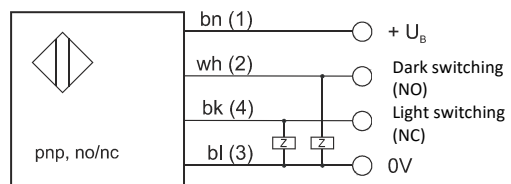
OS160000



OS160070



OE160400 / OE160470



bn = brown - brown - brun
 wh = white - white - blanc
 bk = black - black - noire
 bl = blue - blue - bleu
 Terminal marking of the junction box in brackets

Important note: Do not use cable boxes with LED to connect the transmitters.

Technical data

Article no. Transmitter	Article no. Receiver	Voltage	Output (receiver)	Send-Element	Nominal range	Connection
OS160070	OE160470	10 ... 30V DC	pnp, no/nc (100mA)	LED, red	6m	M8-connector 4pin
OS160000	OE160400	10 ... 30V DC	pnp, no/nc (100mA)	LED, red	6m	2m PVC cable

The use of these devices in applications where the safety of persons depends on their function is not permitted!