

OS / OE1804xA

Through-beam sensor

Installation and environment

Coatings on the optics (glass) 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 alcohol or soapy water.

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) at the desired position so that the optics point in the direction of the monitoring range.
2. Then mount the transmitter (OS) so that it is aligned on the receiver.
3. If the light beam is interrupted, the switching output of the receiver must now switch off safely.

Notice:

Two nuts per device are included for fastening the devices.

The maximum tightening torque of 20Nm must not be overrun!

Setting

When the light beam is interrupted, the switching output switches (exclusive-OR) and the yellow switching state LED goes out.

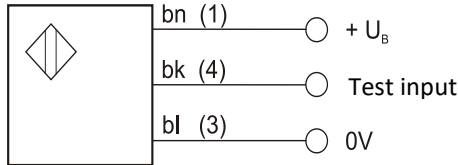
Safe operation is ensured when the green function LED lights up when the light path is free and goes out together with the yellow switching state LED when the switching output is switched on.

If the green LED does not light up when the light path is clear, either the distance between the devices is too great or the optics are dirty.

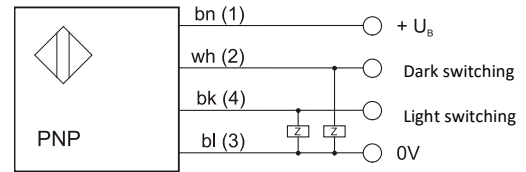
The transmitter has a test input. If the black line is connected to the blue line (0V/GND), the transmitter diode is switched off. At the same time the switching output of the receiver must switch and the yellow LED must go out. If this is not the case, either the receiver is defective or it is influenced by very strong extraneous light.

Electrical connection

OS18000A / OS18002A

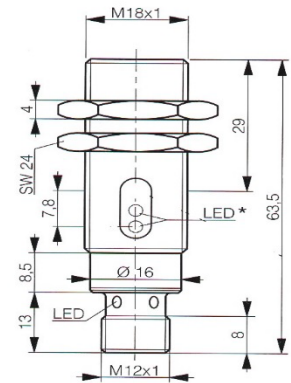
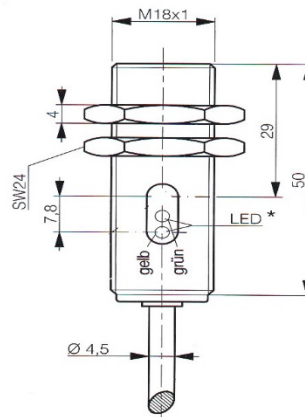


OE18040A / OE18042A



bn = brown - brown
 bk = black - black
 bl = blue - blue
 wh = white - white

Terminal marking of the junction box in brackets



LED receiver only

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
OS18000A	OE18040A	10 ... 35V DC	pnp, no/nc, (200mA)	LED, red	20m	2m PVC cable tail
OS18002A	OE18042A	10 ... 35V DC	pnp, no/nc, (200mA)	LED, red	20m	M12-connector 4pin

Safety Notice:

In case of direct impact on personal safety, the application of these products is prohibited.