

OT15 series

Diffuse-reflection sensors

Installation and environment

Coatings on the optics impair the function. Please install the device in such a way that no dust can be deposited or liquids can get onto the optics. The device should be 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 connecting cable of the fixed cable devices is not suitable for environments containing oil or solvents or for applications in which the cable is frequently moved.

In such cases the use of a connector device with an ipf-Sensorflex cable socket is recommended.

Adjustment

With the built-in potentiometer the sensitivity and thus the switching distance can be changed. When delivered the device is set to the maximum value. The switching distance is reduced by turning it counterclockwise. The full adjustment range of the potentiometer is 12 turns.

Safe operation is ensured if the output switches (light-on mode) when the object is detected and the green function LED lights up in addition to the yellow switching status LED.

If only the yellow LED lights up when the output is switched, either the sensitivity is set too low, the selected switching distance is too large, or the optics are dirty.

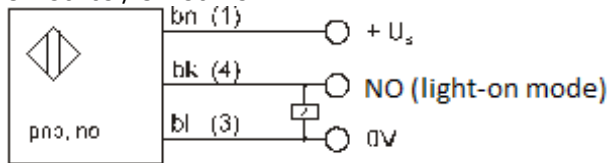
When the green LED lights up, the alarm output of the OT150700 and OT150770 versions is switched on simultaneously.

Note

The devices react to the intensity of light reflected from any object. The specification of the nominal switching distances is based on white paper with a surface of 200 x 200mm. With more reflective materials (e.g. polished aluminum) the maximum switching distance increases. With low reflective materials (e.g. black rubber) the nominal switching distance cannot be reached by far.

Connection:

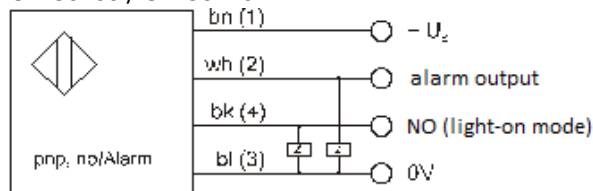
OT150105 / OT150175



bn=brown, bk=black, bl=blue

Terminal marking of cable socket in brackets.

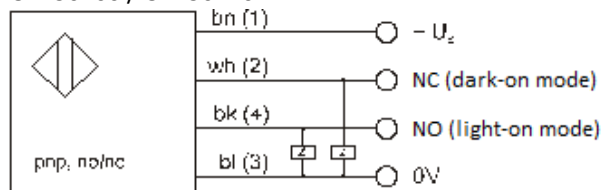
OT150700 / OT150770



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

Terminal marking of cable socket in brackets.

OT150400 / OT150470



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

Terminal marking of cable socket in brackets.

Technical data

Article no.	Voltage	Current	Output	Transmitting element	Nom. switching distance	Connection
OT150105	10 ... 35V DC	200mA	pnp, no	LED, infrared	600mm	2m PVC cable
OT150175	10 ... 35V DC	200mA	pnp, no	LED, infrared	600mm	M8-connector, 3 pin
OT150700	10 ... 35V DC	200mA	pnp, no/alarm	LED, infrared	1200mm	3m PVC cable
OT150770	10 ... 35V DC	200mA	pnp, no/alarm	LED, infrared	1200mm	M8-connector, 4 pin
OT150400	10 ... 35V DC	200mA	pnp, no/nc	LED, infrared	1200mm	3m PVC cable
OT150470	10 ... 35V DC	200mA	pnp, no/nc	LED, infrared	1200mm	M8-connector, 4 pin

Safety warnings:

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

Never use these articles in applications where the safety of a person depends on their functionality.