

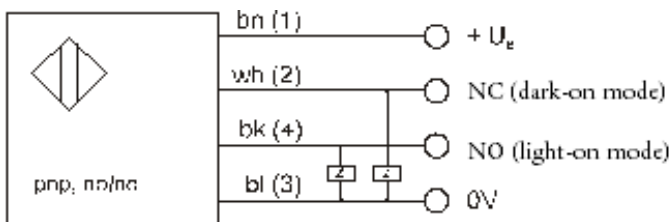
OT170400 / OT17042x

red light diffuse reflection sensor

Adjusting the sensor:

1. The sensor OT17 must first be aligned with the object to be detected so that it can be temporarily mounted.
2. Adjusting the background area:
 While adjusting the background area, the object to be detected must not be in the path of the light beam! If the background is in the detection range (sn) of the sensor, the potentiometer must be turned clockwise until the yellow LED signal lights up.
 If the background is outside the detection range, the potentiometer will have to be turned clockwise until a “click” is heard. This corresponds to the end stop.
3. Adjusting the foreground area:
 While adjusting the foreground area, the object to be detected must be in the beam path. The LED signal should light up. If it does not light up, the object is too far away from the sensor. Next turn the potentiometer counter-clockwise until the LED signal turns off. As this is a multiplex potentiometer, the turns have to be counted if necessary.
4. Setting the switching point:
 Set the potentiometer at the mid-point exactly between the previously determined positions.
5. The diffuse reflection sensor can then be mounted.

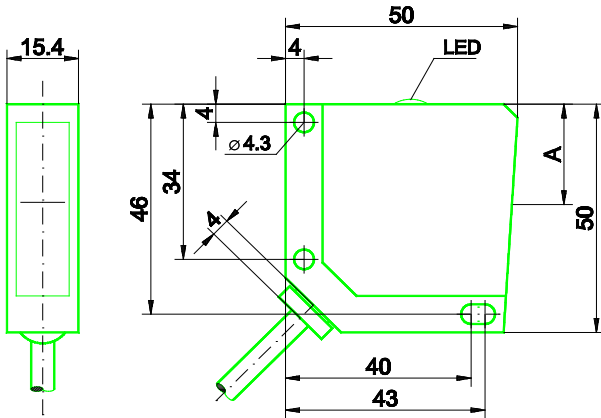
Connection



bn=brown, wh=white, bk=black, bl=blue
 terminal marking of cable sockets in brackets

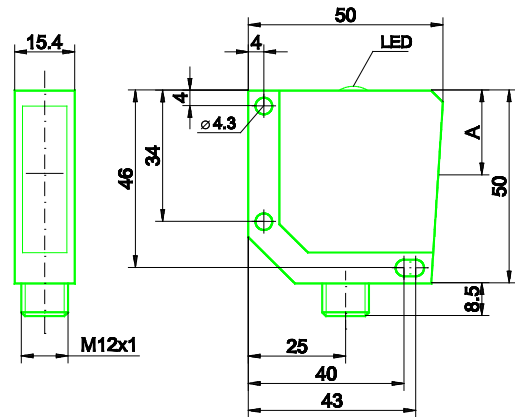
Dimensional drawing

Fig. 1 cable device



transmitter axis A: 34 mm

Fig. 2 connector device



Technical Data

DC

current consumption	< 50mA
voltage drop	< 2V
operating voltage	10...30V DC
ampacity	200 mA
switching frequency	500 Hz
nominal switching distance Sn	OT170400: OT170420 / 20 ... 450mm OT170421: OT170423: 20 ... 450mm 20 ... 600mm
real switching distance Sr	Sn ± 10%
switching hysteresis (diff. refl. sensor)	5% to 15% of Sn
output	npn, no/nc
protection class	IP67 acc. to EN 60529
ambient temperature	-10°C bis +65°C
housing	zinc diecast Zn
transmitting element	red light diode, pulsed 660nm