

# manual

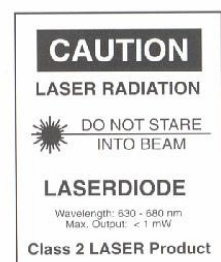
## laser sensor PT170400 / PT170420 / PT170421

### Adjusting the sensor:

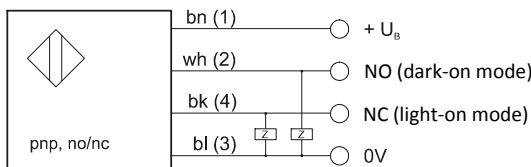
1. The diffuse reflection laser sensor PT17 must first be aligned to the object to be detected so that it can be temporarily mounted.
2. Adjusting the background area:  
When doing this, the object to be detected must not be in the path of the laser beam! If the background is in the detection range (sn) 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 is the final limit stop.
3. Adjusting the foreground area  
When doing this, the object to be detected must be within the beam path. The yellow LED signal should light up. If it does not light up, the object is too far away from the sensor and the distance between this and the sensor must be changed accordingly.  
Next turn the potentiometer counter-clockwise until the LED signal turns off. As this is a multiplex potentiometer, the turns have to be counted.
4. Setting the switching point  
Set the potentiometer at the mid-point exactly between the previously determined positions.
5. The laser scanner can then finally be mounted.

### Note

The attached warning signs on the device relate to the laser equipment. A warning sticker can be ordered with item number AP000026. In addition, the system's control elements should be mounted as far away from the beam as possible and employees using this equipment should be trained accordingly.



### connection



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

**yellow LED:** status display  
When this LED lights up, the switching output is active.

**green LED:** operating voltage display  
When this LED lights up, the operating voltage is applied.

## dimensional drawings

fig. 1 cable device

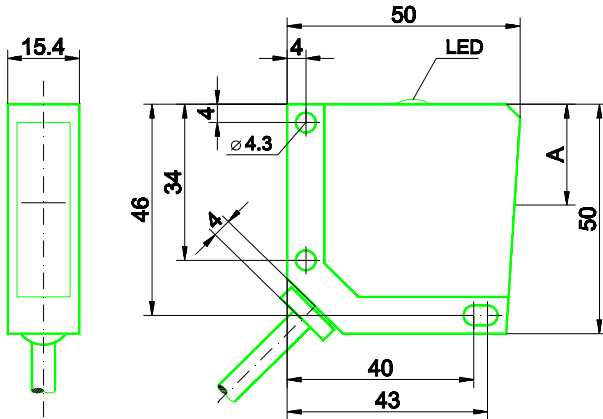
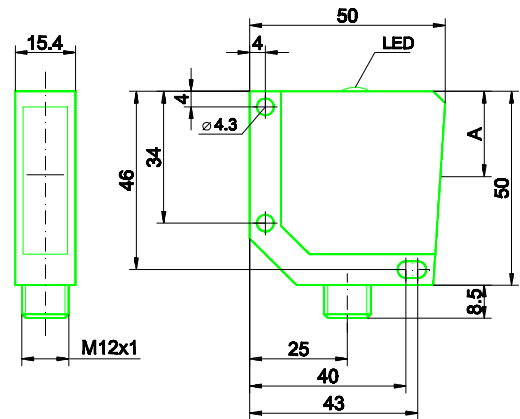
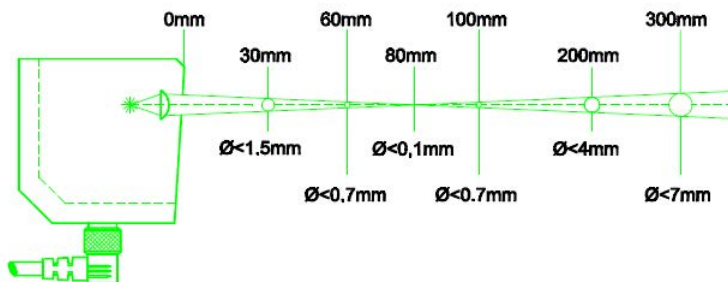


fig. 2 connector device



transmitter axis A: 34mm

fig. 3 laser beam course



## Technical data

## DC

current consumption	< 75mA
voltage drop	< 2V
operating voltage	10 ... 30V DC
ampacity	200mA
switching frequency	800Hz
nominal switching distance $s_n$	diff. reflection sensor 25 ... 300mm
real switching distance $s_r$	$s_n \pm 10\%$
hysteresis (dif. reflection sensor)	5% ... 15% of $s_n$
output	pnp, no/nc
system of protection	IP67 according to EN 60529
ambient temperature	-10°C ... +50°C
housing	zinc diecast Zn
laser class	class 2
transmitting element	laser diode red