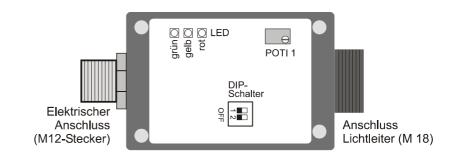


manual

fibre optic amplifier OL400321

<u>1. fig.</u>



2. DIP-switch

| no. / function | switch setting "off" | switch setting "on" | <u>note</u> |
|---------------------|----------------------|---------------------|--|
| 1. switching output | light-on mode | dark-on mode | diff. refl. mode: "off" = n.o "on" = n.c. light barrier mode.: "off" = n.c. "on" = n.o. |
| 2. switching output | pnp | npn | |

3. potentiometer

15-turn-potentiometer for sensitivity adjustment. Clockwise rotation leads to higher sensitivity.

4. display

- LED green: lights when the operating voltage is connected
- LED yellow: lights when the switching output is active (connected through)
- LED red: <u>blinking in the stand-by function mode</u>.

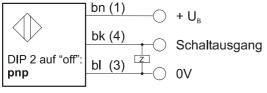
lights in the case of short circuit.

stand-by function mode:

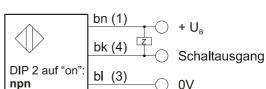
the range of limited conditions, in which the device e.g. when soiled or misadjusted is still working properly. Due to increasing soiling or maladjustment a proper functionality can no longer be guarantied.

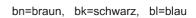
5. electrical connection

(cable socket M12, 3pole, e.g. VK200021)



bn=braun, bk=schwarz, bl=blau





Änderungen vorbehalten!



6. adjustment advice for the diffuse reflexion mode:

- 1. please remove the cover of the amplifier (four screws)
- 2. connect a fibre optic of the type **LT**..... to the amplifier and fix the sensing head of the fibre optic cable.
- 3. position the object which is to be detected in front of the sensing head. Please choose a distance which is similar to the distance in your application. The sensing range of the fibre optic should not be exceeded.
- 4. set the DIP-switch 1 "off".
- 5a. the yellow LED does not light: turn the potentiometer clockwise until the yellow LED lights and the red LED stops blinking.
- 5b. the yellow LED lights: turn the potentiometer anti-clockwise until the red LED starts blinking. Then turn it clockwise until the red LED goes out.
- 6. remove the object in front of the sensing head: The yellow LED has to go out, the red LED must not blink. Otherwise the background is too bright. I this case the distance to the background has to be increased, or you have to choose a darker background material.
- please choose the output function and set the DIP-switch1 accordingly: "off" = light on mode [normally open (no)] "on" = dark on mode [normally closed (nc)]
- 8. install the cover of the amplifier.

7. adjustment advice for the light barrier mode:

- 1. please remove the cover of the amplifier (four screws)
- 2. connect a fibre optic of the type **LS**.... to the amplifier and aim the sensor heads (transmitter and receiver) against each other. The difference between the transmitter and receiver should not exceed the sensing range of the LS....
- 3. set the DIP-switch 1 "on".
- 4a. the yellow LED does not light: turn the potentiometer anti clockwise until the red LED starts to blink; and afterwards turn it clockwise until the red LED goes out.
- 4b. the yellow LED lights: turn the potentiometer clockwise until the yellow LED goes out and the red LED stops blinking.
- 5. position the object which is to be detected between transmitter and receiver. The yellow LED has to light, the red LED must not blink. Otherwise the object is too small or too transparent. In this case you have to choose a sensing head with less light output.
- 6. please choose the output function and set the DIP-switch1 accordingly: "on" = dark on mode [normally open (no)]
 - "off" = light on mode [normally closed(nc)]
- 7. install the cover of the amplifier.
- **note:** a short flashing up of the red LED due to a fast approach of the object into the detection area is without interest.