

# TLB Series

## ▶ TLB-CON3 Pulsating Light Amplifiers

- Insensitive to outside light due to AC operation
- Insensitive to dirt accumulation due to AC operation
- Sensitivity adjustable by means of a potentiometer
- Switching state indication by means of a yellow/green-LED
- High switching frequency (typ. 10 kHz)
- Dirt accumulation indication by means of a red LED
- Push-pull output stage (appropriate for npn and pnp)
- Sturdy aluminum housing



### Design

#### Product name:

#### TLB-CON3

Suitable for connection of fork light barriers and split light barriers of TLB Series with tool plug and 5-pin 270° connector, type Binder 680

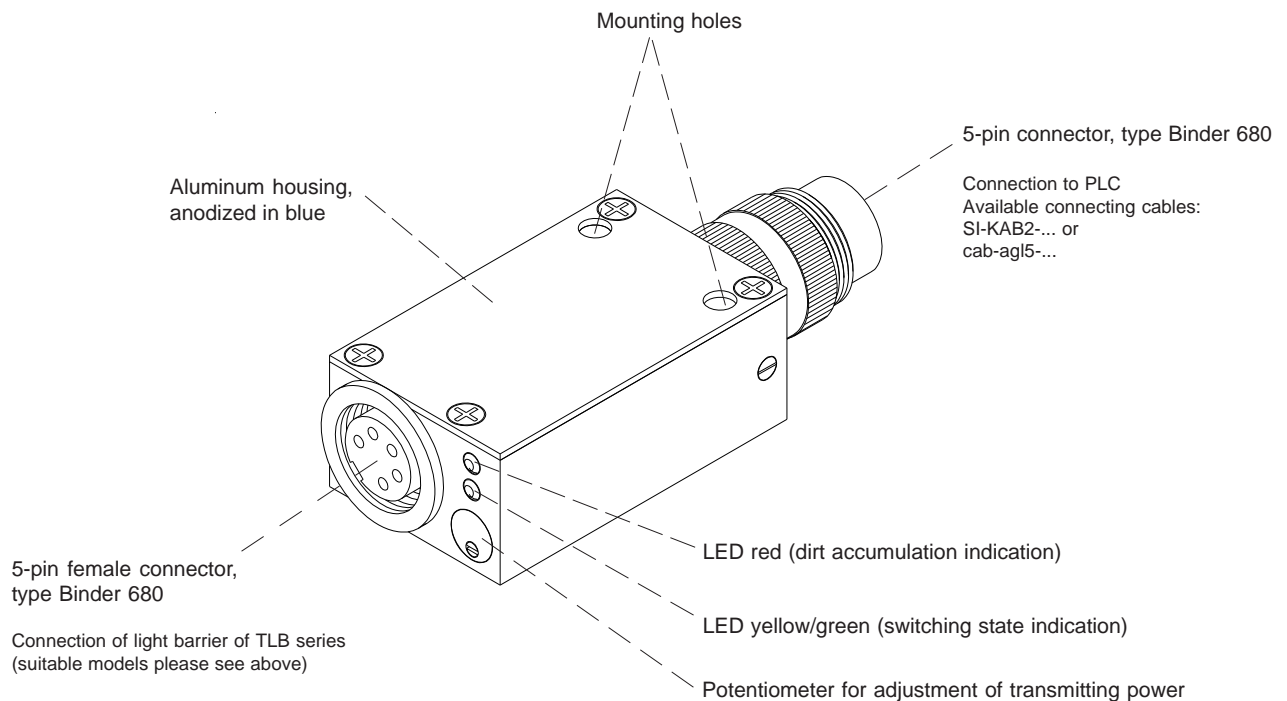
(cf. page 4):

FKB-...-TPO


FKB-...-BL-TPO

SLB-04-TPO

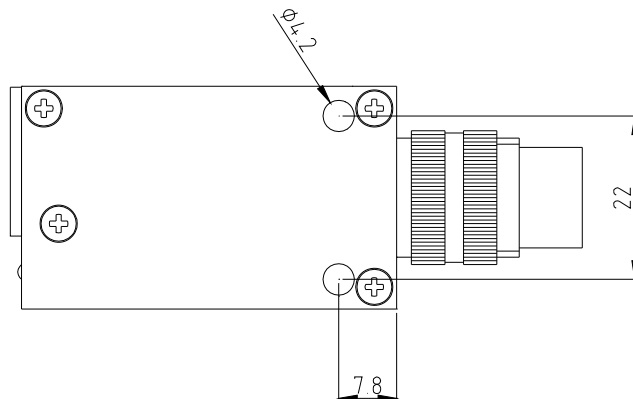
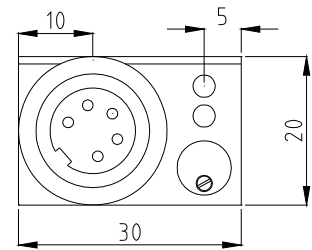
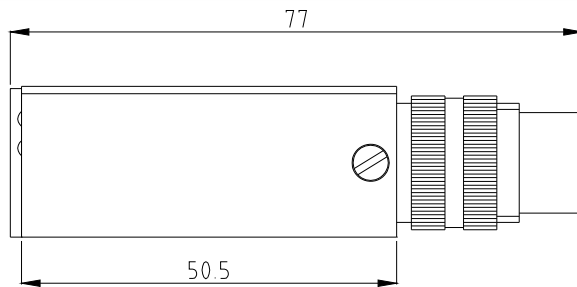
SLB-05-TPO




**Technical Data**

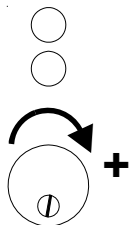
Model	TLB-CON3
Voltage supply	+12VDC ... +32VDC, reversed polarity protection, overload protection
Sensitivity	adjustable by means of a 3-step potentiometer
Current consumption	typ. 50 mA
EMC test acc. to	DIN EN 60947-5-2 
Connector type	Connection to PLC: 5-pole 270° connector, type Binder 680 Connection to light barrier: 5-pole female connector, type Binder 680
Operating temperature range	-20°C ... +70°C
Storage temperature range	-20°C ... +85°C
Housing	Aluminum, anodized in blue
Maximum switching current	100 mA, short circuit protection
Switching frequency	typ. 10 kHz
Output	Q = npn dark-switching (npn normally open) / pnp bright-switching (pnp normally closed)
Switching state indication	by means of yellow/green LED
Dirt accumulation indication	by means of red LED
AC operation	10 kHz
Mechanical protection	IP67

Dimensions



(All dimensions in mm)

Setting



**LED red (dirt accumulation indication)**

LED red: Sensor dirty

**LED yellow/green (switching state indication)**

LED yellow: Sensor covered  
LED green: Sensor free

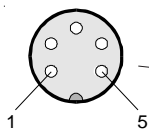
**3-step-potentiometer for adjustment of transmitting power:**

Rotation clockwise: Decrease of transmitting power (increase of sensitivity)

Connector Assignment

**5-pole female connector, type Binder 680  
(connection to light barrier type FKB-... or SLB-...)**

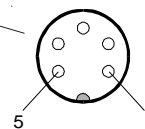
- |          |  |
|----------|--|
| Pin No.: | Assignment:                            |
| 1        | Transmitter cathode / Receiver emitter |
| 2        | not connected                          |
| 3        | not connected                          |
| 4        | Transmitter anode                      |
| 5        | Receiver collecto                      |



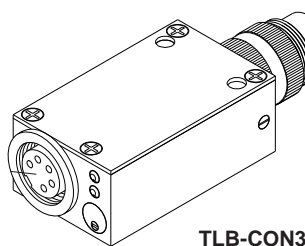
Connecting cable:  
SI-KAB2-2m (l=2m)  
(1x 5-pole fem. conn. Binder 680, 1x 5-pole male conn. Binder 680)

**5-pole connector, type Binder 680  
(connection to PLC)**

- |          |                      |
|----------|----------------------|
| Pin No.: | Assignment:          |
| 1        | GND (0V)             |
| 2        | +Ub (+12 ... +32VDC) |
| 3        | Output Q             |
| 4        | not connected        |
| 5        | Connection control   |



Available connecting cables:  
SI-KAB2-2m (l=2m)  
(1x 5-pole fem. conn. Binder 680, 1x 5-pole male conn. Binder 680)  
cab-agl5-2m (l=2m)  
(1x 5-pole fem. conn. Binder 680, 5x open threads + shield)

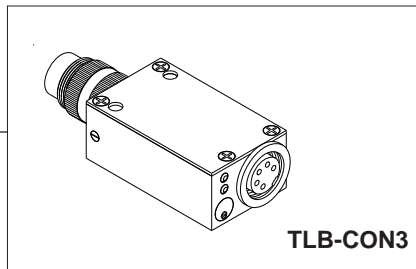


TLB-CON3



**Product Line**

**Pulsating light amplifier:**



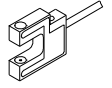
Connecting cable:  
SI-KAB2-2m or  
cab-agl5-2m

Connecting cable:  
SI-KAB2-2m

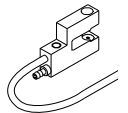
**Fork light barriers:**

(connection via 5-pin plug, type Binder 680)

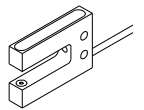
**FKB-06-...-TPO**



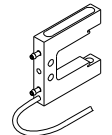
**FKB-06-...-BL-TPO**



**FKB-08-...-TPO**



**FKB-08-...-BL-TPO**



**Split light barriers:**

(connection via 5-pin plug, type Binder 680)

**SLB-04-TPO**



**SLB-05-TPO**

