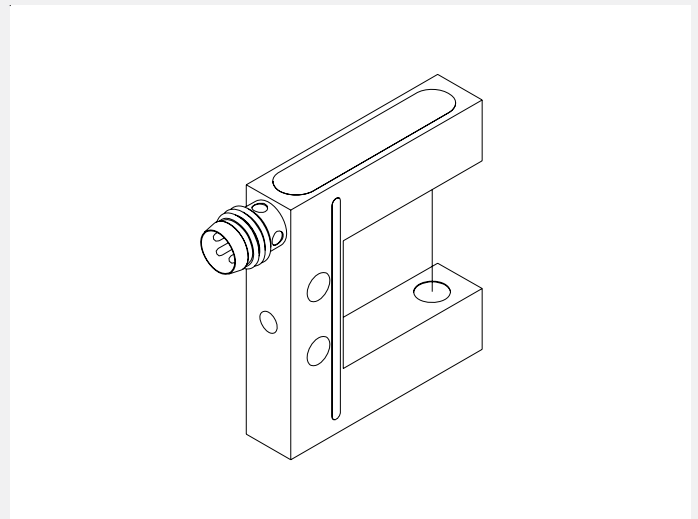


TLB Series

► FKB-08-...-M8

Fork light barriers

- Insensitive to outside light due to optical filtering
- Various fork sizes available
- Various aperture sizes available
- 4-pin M8-connector
- High resolution
- Sturdy metal housing
- Alternatively version with visible red light beam or IR version
- For connection with amplifier TLB-CON12-M8



Design

Product name:

FKB-08-(fork size)-(aperture)-(type)-M8

Available fork sizes: (dimensions cf. page 3)
for type IR and VIS:

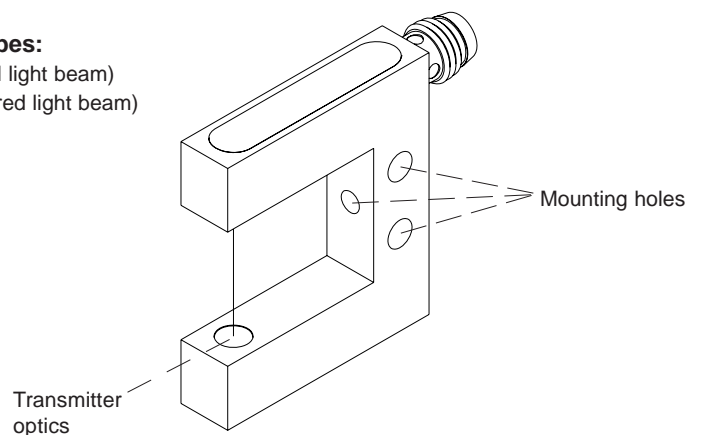
- 10/15 (fork width A=10 mm, fork depth B=15 mm)
 - 10/30 (fork width A=10 mm, fork depth B=30 mm)
 - 20/15 (fork width A=20 mm, fork depth B=15 mm)
 - 20/20 (fork width A=20 mm, fork depth B=20 mm)
 - 20/30 (fork width A=20 mm, fork depth B=30 mm)
 - 20/40 (fork width A=20 mm, fork depth B=40 mm)
 - 20/60 (fork width A=20 mm, fork depth B=60 mm)
 - 20/80 (fork width A=20 mm, fork depth B=80 mm)
 - 30/15 (fork width A=30 mm, fork depth B=15 mm)
 - 30/30 (fork width A=30 mm, fork depth B=30 mm)
- for type IR:
- 40/40 (fork width A=40 mm, fork depth B=40 mm)
 - 40/60 (fork width A=40 mm, fork depth B=60 mm)
 - 40/80 (fork width A=40 mm, fork depth B=80 mm)
 - 80/50 (fork width A=80 mm, fork depth B=50 mm)
 - 100/60 (fork width A=100 mm, fork depth B=60 mm)

Available apertures: (circular apertures, Ø in mm)

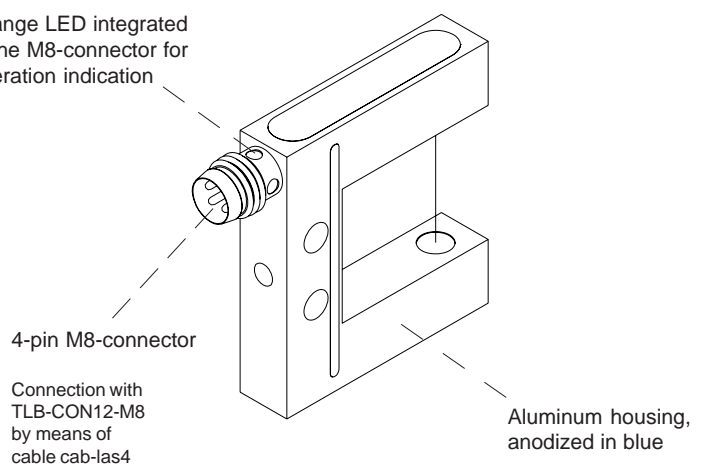
Size	Type IR	Type VIS
10/15	d0.6, d0.8, d1.0	d0.6, d0.8, d1.0
10/30	d0.6, d0.8, d1.0	d0.6, d0.8, d1.0
20/15	d0.8, d1.0	d0.8, d1.0
20/20	d0.8, d1.0	d0.8, d1.0
20/30	d0.8, d1.0	d0.8, d1.0
20/40	d0.8, d1.0	d0.8, d1.0
20/60	d0.8, d1.0	d0.8, d1.0
20/80	d0.8, d1.0	d0.8, d1.0
30/15	d0.8, d1.0, d1.2	d0.8, d1.0, d1.2
30/30	d0.8, d1.0, d1.2	d0.8, d1.0, d1.2
40/40	d1.0, d1.2	---
40/60	d1.0, d1.2	---
40/80	d1.0, d1.2	---
80/50	d1.5	---
100/60	d1.5	---

Available Types:

- IR (infrared light beam)
- VIS (visible red light beam)



Orange LED integrated in the M8-connector for operation indication



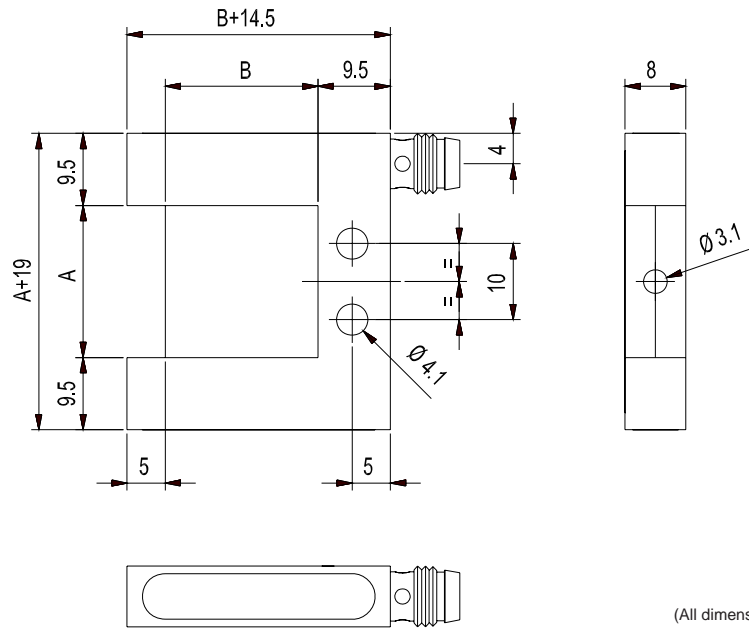

Technical Data

Model	FKB-08-M8
Transmitter	IR type: IR-LED, 905 nm, DC operation: max. opt. power < 0,4 mW, AC operation: medium opt. power < 0,4 mW VIS type: red LED 660 nm, opt. power 0,4 mW
Minimum detectable object	typ. 10 µm (DC operation, depending on the aperture), typ. 200 µm (AC operation)
Light spot dimension (at transmitter output)	IR type: Ø 0.6 mm, 0.8 mm, 1.0 mm, or 1.2 mm VIS type: Ø 0.8 mm
Repeatability	typ. 10 µm
Optical filter	IR type: Daylight rejection filter RG715 VIS type: IR rejection filter KG2
Receiver aperture	IR type: Ø 0.6 mm, 0.8 mm, 1.0 mm, 1.2 mm, or 1.5 mm (depends on fork size) VIS type: Ø 0.6 mm, 0.8 mm, 1.0 mm, or 1.2 mm (depends on fork size)
EMC test acc. to	IEC - 801...
Ambient light	up to 5000 Lux (AC operation)
Connector type	4-pin M8-connector
Connecting cable	cab-las4 (available in various lengths: 1m, 1.5m, 2m, 3m, or 5m)
Operation indication	by means of an orange LED integrated in the M8-connector
Mechanical protection	IP67
Operating temperature range	-20°C ... +80°C
Storage temperature range	-20°C ... +80°C
Housing	Aluminum, anodized in blue
Housing dimensions	see page 3

Dimensions

FKB-08-(fork size):

Fork size	Dim. A	Dim. B
10/15	10 mm	15 mm
10/30	10 mm	30 mm
20/15	20 mm	15 mm
20/20	20 mm	20 mm
20/30	20 mm	30 mm
20/40	20 mm	40 mm
20/60	20 mm	60 mm
20/80	20 mm	80 mm
30/15	30 mm	15 mm
30/30	30 mm	30 mm
40/40	40 mm	40 mm
40/60	40 mm	60 mm
40/80	40 mm	80 mm
80/50	80 mm	50 mm
100/60	100 mm	60 mm

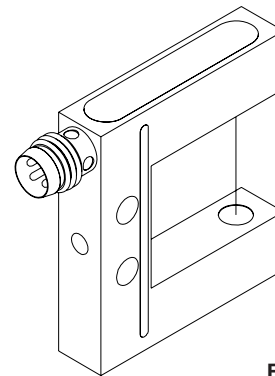


(All dimensions in mm)

Connector Assignment

Connector assignment
4-pin M8-connector:

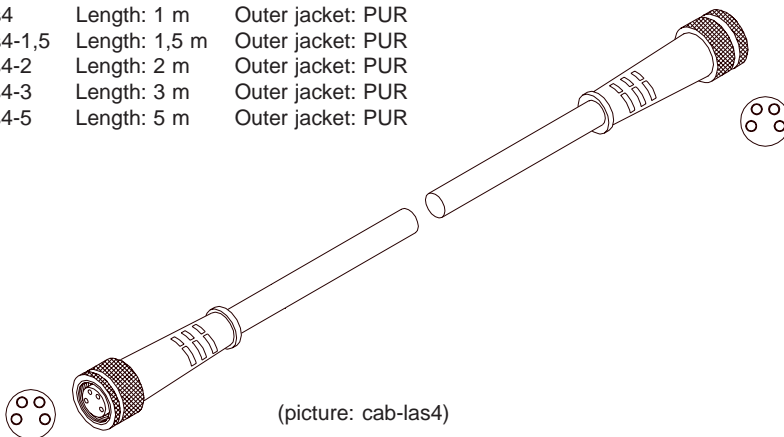
Pin No.:	Assignment:
1	Transmitter anode
2	Transmitter cathode + receiver emitter
3	n.c.
4	Emitter cathode



FKB-08-...-M8

Connecting cable
for connection with TLB-CON12-M8:

cab-las4	Length: 1 m	Outer jacket: PUR
cab-las4-1,5	Length: 1,5 m	Outer jacket: PUR
cab-las4-2	Length: 2 m	Outer jacket: PUR
cab-las4-3	Length: 3 m	Outer jacket: PUR
cab-las4-5	Length: 5 m	Outer jacket: PUR

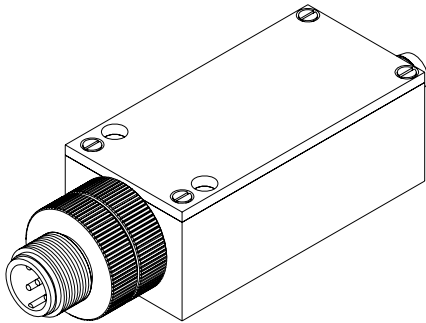


(picture: cab-las4)



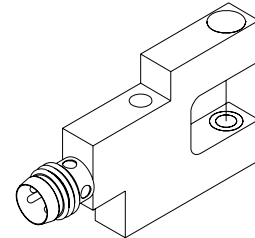
Product Line

TLB-CON12-M8:

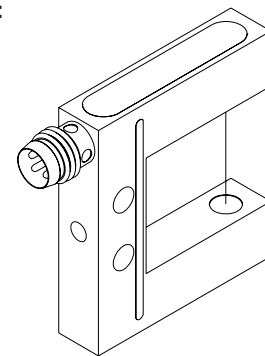


Connecting
cable:
cab-las4

FKB-06-M8:



FKB-08-M8:



Interfacing

Connection of TLB-CON12-M8:

Up to 8 amplifiers of type TLB-CON12-M8 can be connected to the die control unit via an interface box of type:

- BOX-M12/4** (4-fold)
- BOX-M12/6** (6-fold, see picture opposite)
- BOX-M12/8** (8-fold)

