

TLB Series

FKB-08-BL-TPN

Fork light barriers with blast-air connector

- Insensitive to outside light due to optical filtering
- Various fork sizes available
- Various aperture sizes available
- Oil resistant connecting cable
- High resolution
- Sturdy metal housing
- Alternatively version with visible red light beam or IR version
- Insensitive to dirt accumulation due to blast air connector



Design

Product name:

- FKB-08-(fork size)-(aperture)-(type)-BL-TPN-500** (with blast-air connector, tool plug with 8-pin connector, cable l=500 mm)
FKB-08-(fork size)-(aperture)-(type)-BL-TPN-1000 (with blast-air connector, tool plug with 8-pin connector, cable l=1000 mm)

Available fork sizes: (cf. dimensions page 3)

for type IR and VIS:

- 20/15** (fork width A=20 mm, fork depth B=15 mm)
- 20/30** (fork width A=20 mm, fork depth B=30 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)

for type IR:

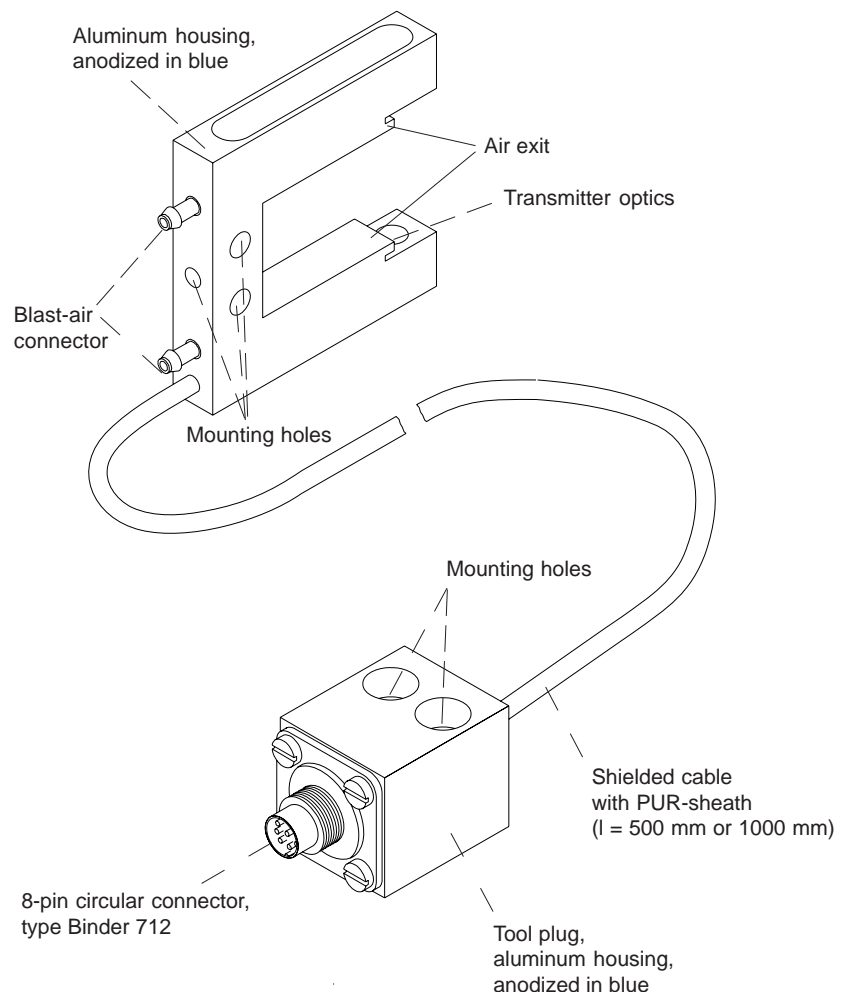
- 40/60** (fork width A=40 mm, fork depth B=60 mm)
- 40/80** (fork width A=40 mm, fork depth B=80 mm)
- 60/60** (fork width A=60 mm, fork depth B=60 mm)
- 80/50** (fork width A=80 mm, fork depth B=50 mm)

Available types:

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

Available apertures: (circular apertures, Ø in mm)

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



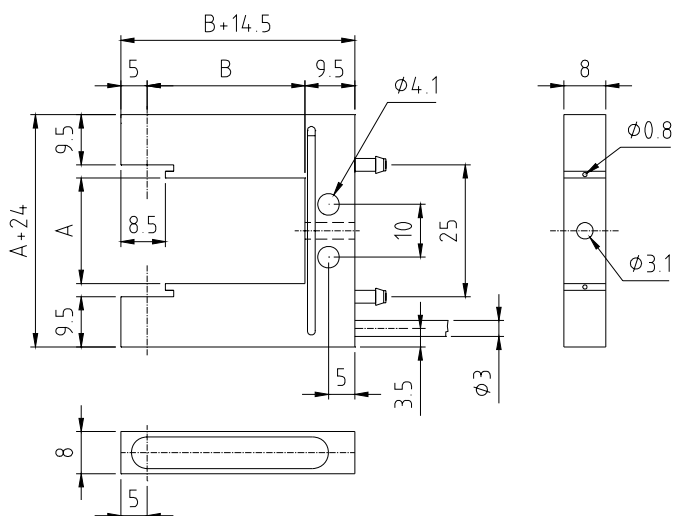

Technical Data

Model	FKB-08-BL-TPN
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 0.8 mm, 1.0 mm, 1.2 mm, or 1.5 mm (depends on fork size) VIS type: Ø 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)
Cable type	PUR sheath, black, 4-conductor, shielded
Cable length	500 mm or 1000 mm
Mechanical protection	IP67
Connector type	Tool plug with 8-pin circular connector, type Binder 712
Operating temperature range	-20°C ... +80°C
Storage temperature range	-20°C ... +80°C
Housing	Aluminum, anodized in blue
Housing dimensions	see page 3

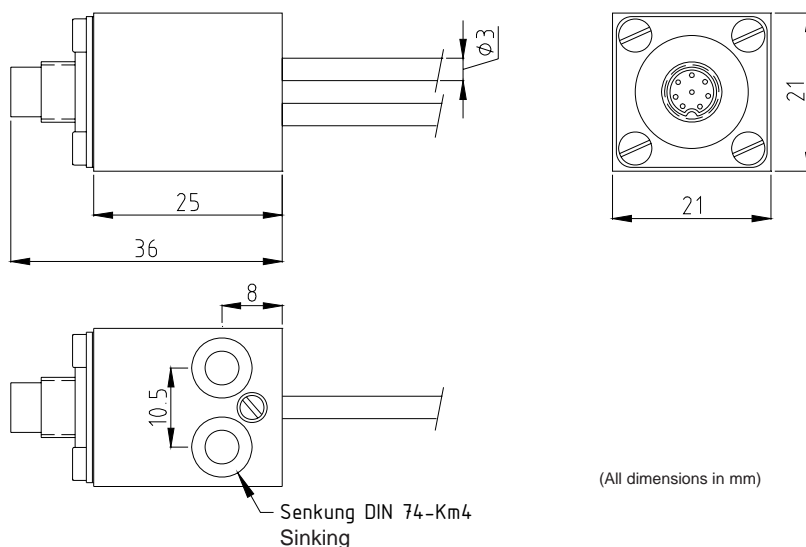
Dimensions

FKB-08-(fork size)-...-BL:

Fork size	dim. A	dim. B
20/15	20 mm	15 mm
20/30	20 mm	30 mm
20/60	20 mm	60 mm
20/80	20 mm	80 mm
30/15	30 mm	15 mm
40/60	40 mm	60 mm
40/80	40 mm	80 mm
60/60	60 mm	60 mm
80/50	80 mm	50 mm



TPN (tool plug):

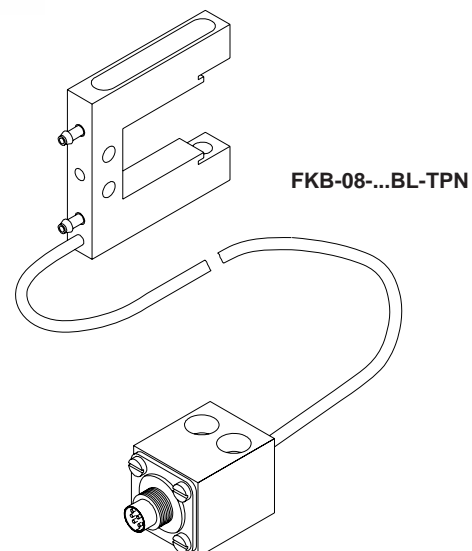
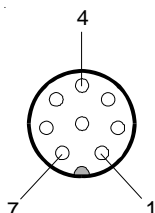


(All dimensions in mm)

Connector Assignment

Assignment 8-pin circular connector, type Binder 712:

Pin:	Assignment:
1	n.c.
2	n.c.
3	Transmitter anode
4	Receiver collector
5	Transmitter cathode
6	Receiver emitter
7	n.c.
8	n.c.
Shield	





Product Line

Fork light barriers:

FKB-06-...
FKB-06-...-P
FKB-06-...-TPN
FKB-06-...-TPO

FKB-06-...-BL
FKB-06-...-BL-P
FKB-06-...-BL-TPN
FKB-06-...-BL-TPO

FKB-08-...
FKB-08-...-P
FKB-08-...-TPN
FKB-08-...-TPO

FKB-08-...-BL
FKB-08-...-BL-P
FKB-08-...-BL-TPN
FKB-08-...-BL-TPO

Connecting cable:
cab-tlb8/702 (2m)

Split light barriers:

SLB-01
SLB-01-P
SLB-01-TP

SLB-02
SLB-02-P
SLB-02-TP

SLB-03
SLB-03-P
SLB-03-TP

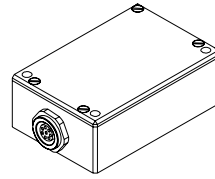
SLB-04
SLB-04-P
SLB-04-TPN
SLB-04-TPO

SLB-05
SLB-05-P
SLB-05-TPN
SLB-05-TPO

SLB-06
SLB-06-P
SLB-06-TP

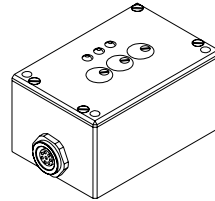
SLB-08
SLB-08-P
SLB-08-TP

Pulsating light amplifiers:



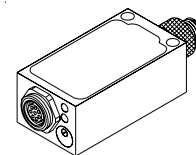
TLB-CON5

Connecting cables:
cab-M8/4-g-2 (2m)
cab-las5/PC (5m)



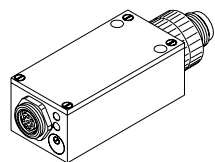
TLB-CON6

Connecting cable:
cab-las8/702-fem (2m)



TLB-CON8

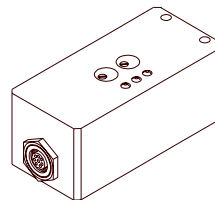
Connecting cable:
cab-M8/3-g-2 (2m)



TLB-CON12

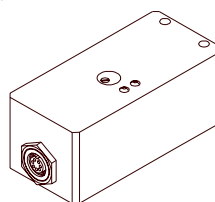
Connecting cable:
cab-M12/5-g-2-shd (2m)

Constant light amplifiers:



TLB-CON2

Connecting cable:
cab-las8/702-fem (2m)



TLB-CON11

Connecting cable:
cab-las8/702-fem (2m)

