

TLB Series

▶ FKB-06-BL-TPO

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-06-(fork size)-(aperture)-(type)-BL-TPO-500 (with blast-air connector, tool plug with 5-pin 270° connector, cable l=500 mm)

FKB-06-(fork size)-(aperture)-(type)-BL-TPO-1000 (with blast-air connector, tool plug with 5-pol. 270° connector, cable l=1000 mm)

Available fork sizes: (cf. dimensions page 3)

- 5/10** (fork width A=5 mm, fork depth B=10 mm)
- 10/10** (fork width A=10 mm, fork depth B=10 mm)
- 10/15** (fork width A=10 mm, fork depth B=15 mm)

Available types:

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

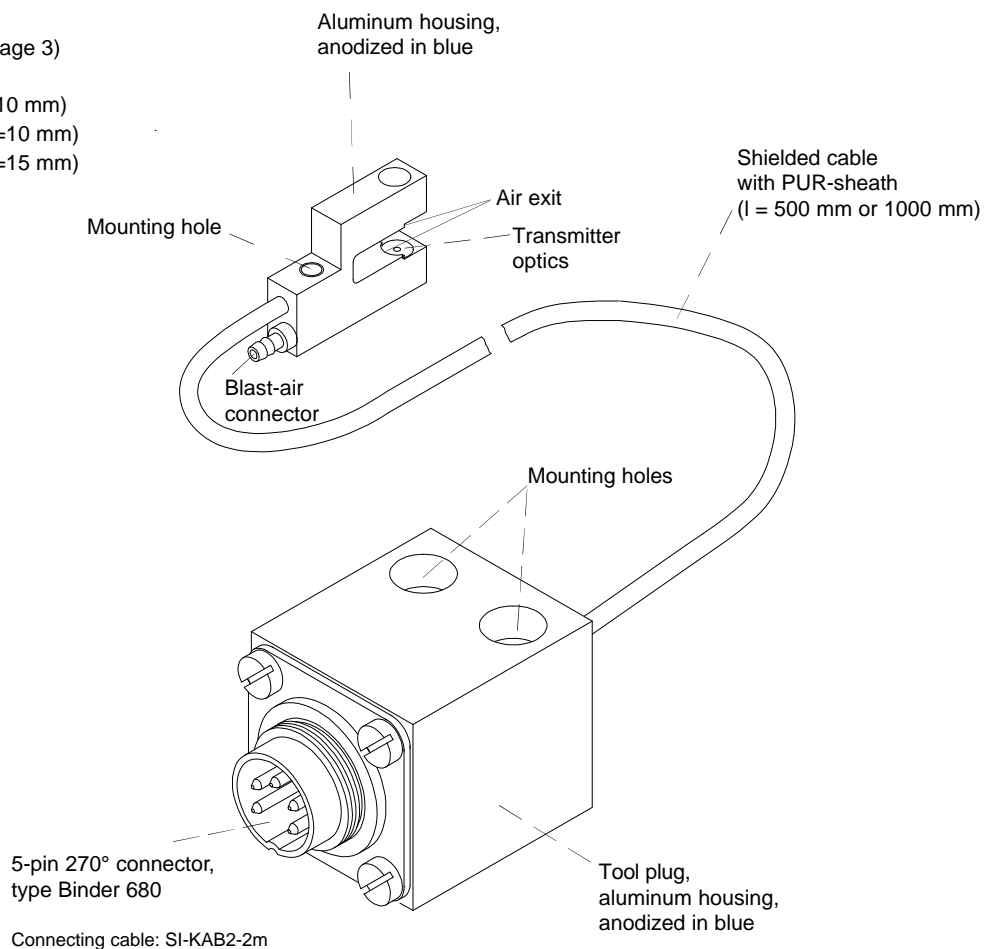
Available apertures:

for type IR:

- d0.4** (circular aperture Ø 0.4 mm)
- d0.6** (circular aperture Ø 0.6 mm)
- d0.8** (circular aperture Ø 0.8 mm)
- d1.0** (circular aperture Ø 1.0 mm)
- d1.2** (circular aperture Ø 1.2 mm)

for type VIS:

- d0.6** (circular aperture Ø 0.6 mm)
- d0.8** (circular aperture Ø 0.8 mm)
- d1.0** (circular aperture Ø 1.0 mm)
- d1.2** (circular aperture Ø 1.2 mm)

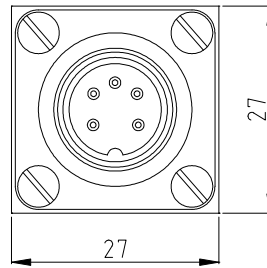
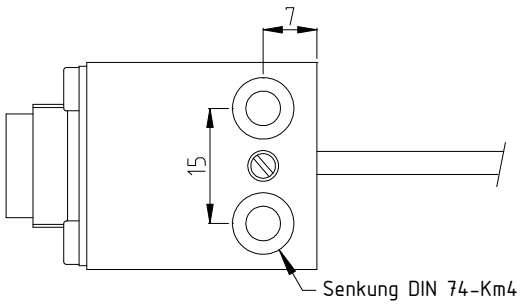
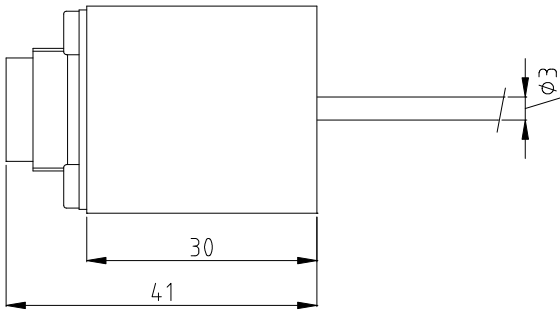



Technical Data

Model	FKB-06-BL-TPO
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 0.4 mm, 0.6 mm, 0.8 mm, 1.0 mm, or 1.2 mm VIS type: Ø 0.6 mm, 0.8 mm, 1.0 mm, or 1.2 mm
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 5-pin 270° connector, type Binder 680
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

TPO (tool plug):

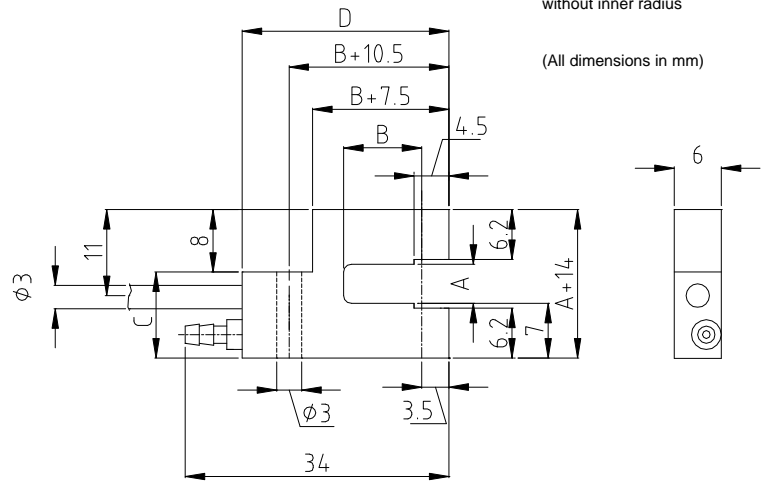


FKB-06-(fork size)-...-BL:

Fork size 5/10
with inner radius R=1

Fork sizes 10/10 and 10/15
without inner radius

(All dimensions in mm)

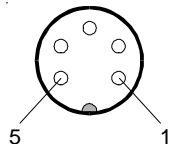


Fork size	dim. A	dim. B	dim. C	dim. D
5/10	5 mm	10 mm	11 mm	26.5 mm
10/10	10 mm	10 mm	20 mm	26.5 mm
10/15	10 mm	15 mm	20 mm	31.5 mm

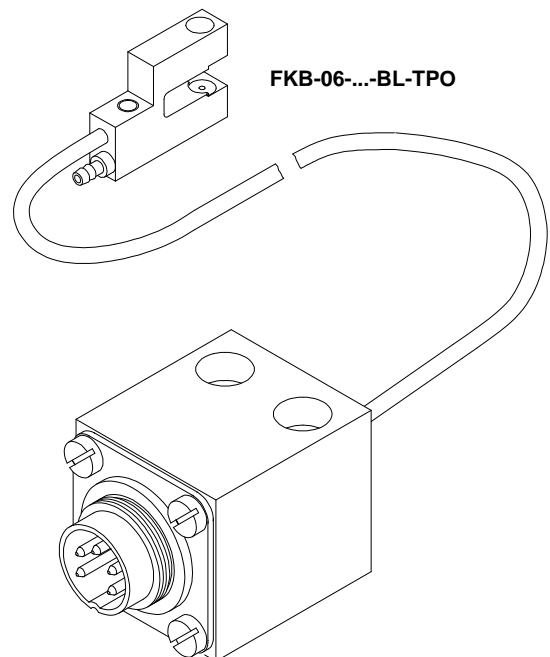
Connector Assignment

Assignment 5-pin 270° connector, type Binder 680:

Pin:	Assignment:
1	Transmitter cathode / Receiver emitter
2	n.c.
3	n.c.
4	Transmitter anode
5	Receiver collector



Connecting cable: SI-KAB2-2m
(1x 5-pole female connector Binder Series 680,
1x 5-pole connector Binder Series 680)





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

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

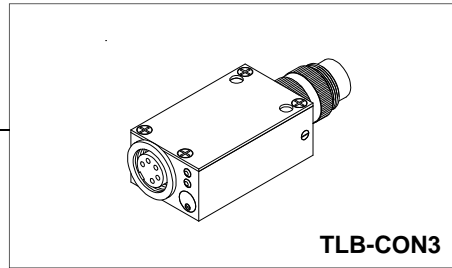
SLB-04
SLB-04-P
SLB-04-TPN
SLB-04-TPO

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 amplifier:



Connecting cable:
SI-KAB2 (2m)

Connecting cable:
SI-KAB2 (2m)