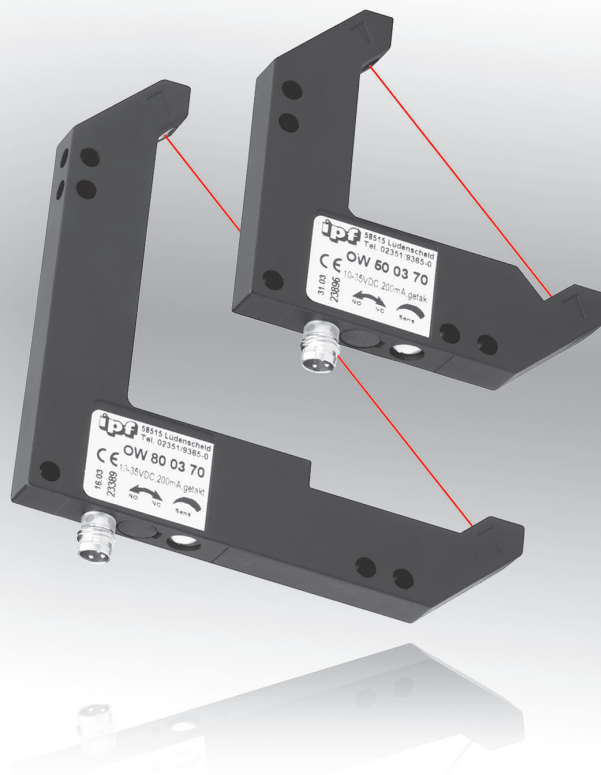


dimensions	75 x 75 x 10mm
	105 x 105 x 10mm
	150 x 150 x 12mm
through-beam	distance transmitter / receiver 60mm
	100mm
	159mm

- ✓ approach from 3 directions possible
- ✓ robust metal housing
- ✓ switching state display by LED
- ✓ adjustable sensitivity
- ✓ no / nc selectable
- ✓ integrated amplifier
- ✓ high degree of protection
- ✓ high switching frequency



**universal mounting
red light devices with glass lens**



description

ipf angular light barriers operate using the same principle as the through-beam sensor. The transmitter, receiver and all of the electronics are located in a single housing. This ensures quick easy mounting.

The devices are available with pulsed infrared or red light. The main technical difference for the application is due to the external light shielding and the variable response behavior with translucent objects. The devices with red light transmitters have a scratch resistant lens made of mineral glass.

Due to the high switching frequency, the short response time and the high resolution, exact positioning and safe recognition of very quick movements are possible, even for very small parts. The interruption of the light beam is converted into a switching signal by the integrated amplifier. These angular light barriers are perfectly suited to a wide range of applications in the automation technology. This is due to their robust metal housing, the high degree of protection and the high resistance to interference.

Angular light barriers are applied wherever products must

be recognized safely and despite varying directions of approach.

They provide a good service as limit or position switches and pulse generators for automated machines and production processes.

Thanks to the integrated amplifier, counters, rotation speed monitors and length or angular measuring equipment can be controlled directly.

The sensitivity can be adjusted with the integrated potentiometer. Thus, the angled through-beam sensors also recognize print marks or labels on translucent backing material.

The output function can be reversed with a light-on/dark-on change-over switch.

application examples

- ▶ checking of stacking heights
- ▶ detection of parts on conveyor belts
- ▶ transportation monitoring
- ▶ ejection check for compression molds

Technical drawing of the M8x1 LED sensor assembly, showing dimensions in millimeters (mm).

Top View:

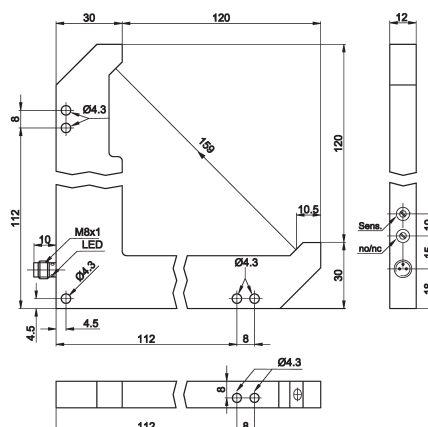
- Overall width: 80 mm
- Overall height: 80 mm
- Left side mounting holes: 25 mm from the left edge, 8 mm apart.
- Bottom side mounting holes: 72 mm from the left edge, 8 mm apart.
- Diagonal dimension: 100 mm
- Bottom right corner dimensions: 10.5 mm and 25 mm.
- Bottom edge hole: Ø4.3 mm, 8 mm from the right edge.
- Left edge hole: Ø4.3 mm, 4.5 mm from the bottom edge.
- Mounting hole: M8x1 LED, 10 mm from the left edge.

Side View:

- Overall height: 10 mm
- Mounting holes: 17.5 mm and 18 mm from the bottom edge.
- Labels: "Sens." and "no/nc" (normally open/closed).

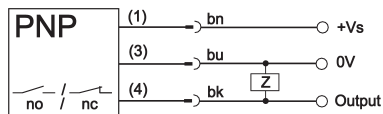
Detail View:

- Overall width: 72 mm
- Mounting hole: Ø4.3 mm, 6.75 mm from the left edge.
- Bottom edge hole: Ø4.3 mm, 8 mm from the right edge.

article-no.	OWKB0370
version	159mm infrared light
article-no.	OWKB0372
version	159mm red light
	
TECHNICAL DATA	
fork width	159mm
resolution	Ø 1.0mm
output	pnp, no / nc
operating voltage	10 ... 35V DC
current consumption (w/o load)	ff 40mA
output current (max. load)	200mA
voltage drop (max. load)	2.8V DC
hysteresis	< 0.25mm
repeatability	0.06mm
external light shielding	80klux / 80kLux
transmitting element (pulsed)	LED, infrared / LED, red light
wavelength	880nm / 660nm
switching frequency	2kHz
switching state display	yellow LED
sensitivity	potentiometer
short-circuit protection	+
reverse polarity protection	+
housing material	zinc diecast
dimensions	150x150x12mm
temperature range	-10 ... +60°C
degree of protection (EN 60529)	IP67
connection	M8-connector, 3-pin
connection accessories	e.g. VK200071
accessories	AO000099

connection

connector device

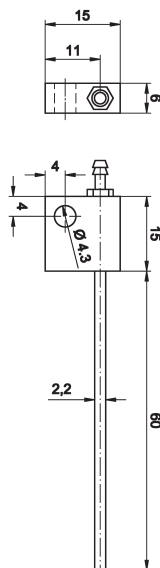
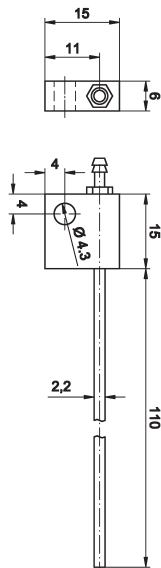


wire colors: bn = brown (1), bu = blue (3), bk = black (4)

accessories

AO000099

AO000100



ACCESSORIES

article-no.	description	note
AO000099	air purge	pipe length 110mm
AO000100	air purge	pipe length 60mm

This data sheet contains the standard versions only. Kindly request the availability of other output- and connection versions.

We will be pleased to supply the matching cable socket for your devices with connector. Please refer to the list in catalog chapter "accessories" under "cable sockets **ipf** -SENSORFLEX®" or search our website for "VK".

Warning: Never use these devices in applications where the safety of a person depends on their functionality.

This data sheet as well as your personal contact can be found at www.ipf-electronic.com



ipf electronic gmbh

Kalver Straße 25 – 27
58515 Lüdenscheid – Germany

Tel +49 2351 9365-0
Fax +49 2351 9365-19

www.ipf-electronic.com
info@ipf-electronic.com

Subject to alteration!
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