dimensions	60 x 60 x 15mm
	to
	458.5 x 340 x 20mm

through-beam	active zone	25 x 23mm
		to
		300 x 397.5mm

✔ **robust metal housing**

✔ **easy mounting and high degree of protection**

✔ **compressed air connection for cleaning the optics**

✔ **removeable cross arm**

✔ **switching state display by LED**

✔ **no / nc selectable**

✔ **adjustable sensitivity**

✔ **pulse stretching up to 150ms**

✔ **integrated amplifier**

✔ **high switching frequency due to short response times**

**dynamic or static function
impact and reflection protection**

| ⊢→ | DC ═ | PNP | M8 | ▢ |

description

Optoelectronic frame light barriers operate using the same principle as the through-beam sensor. A large number of transmitters and respective receivers have been integrated into the limbs forming a light curtain.

The integrated amplifier converts any interruption of a light beam into a switch signal. The frame light barrier is capable of detecting very small objects.

Either the dynamic or static function of the devices can be selected.

Parts which move quickly (e.g. in free descent) through the light barrier, are detected in the dynamic mode. Objects that are permanently within the frame or move very slowly, remain undetected. The output remains switched for the set pulse time only.

The static mode allows for a detection of slow-moving or static conditions. The output remains activated for as long as the object to be detected stays in the active zone.

An integrated potentiometer allows for adjustment of the response sensitivity.

A second potentiometer enables adjustment of the output pulse width. Independently of the speed of the part to be detected the device can be adapted to the requirements of the connected control system.

The switching output function may be selected between normally open (no) and normally closed (nc).

application examples

▶ ejection checks on stamping machines or blanking presses

▶ presence checks

▶ linear measurements of wires or tubes

article-no.	OH250370	OH400370
active zone	25x23mm	40x49mm

TECHNICAL DATA

active zone	25x23mm	40x49mm
resolution	dynamic Ø 0.7mm / static Ø 1mm	dynamic Ø 0.7mm / static Ø 1mm
output signal	pnp, no/nc	pnp, no/nc
operating voltage	10 ... 35V DC	18 ... 35V DC
current consumption (w/o load)	≤ 25mA	≤ 30mA
output current (max. load)	200mA	200mA
voltage drop (max. load)	2.0V DC	2.5V DC
transmitting element (pulsed)	LED, infrared light	LED, infrared light
wavelength	880nm	880nm
response/decay time	0.1ms / 0.1 ... 150ms	0.1ms / 0.1 ... 150ms
display (signal)	yellow LED	yellow LED
sensitivity adjustment	potentiometer	potentiometer
time adjustment	potentiometer 0.1 ... 150ms	potentiometer 0.1 ... 150ms
adjustment	change-over switch stat./dyn. and no/nc	change-over switch stat./dyn. and no/nc
short-circuit protection	+	+
reverse polarity protection	+	+
dimensions	60x60x15mm	125x80x20mm
housing material	aluminum	aluminum
lens material	plastic PMMA	plastic PMMA
operating temperature	0 ... +60°C	0 ... +60°C
degree of protection (EN 60529)	IP67	IP67
connection	M8-connector, 3-pin	M8-connector, 3-pin
connection accessories	e.g. **VK200071**	e.g. **VK200071**

article-no.	OH700370	OHK00370
active zone	**70x62mm**	**100x92mm**

TECHNICAL DATA

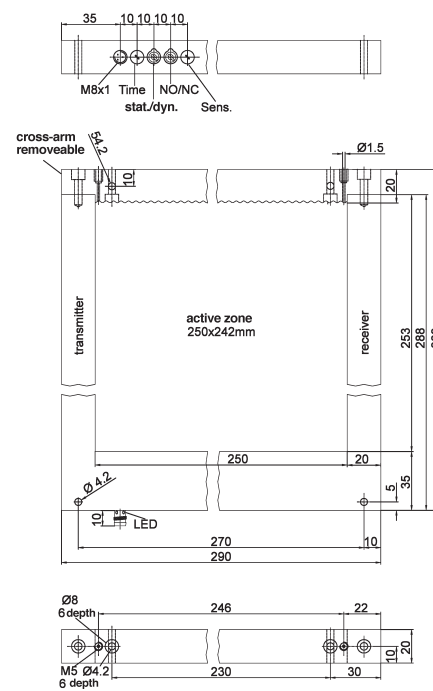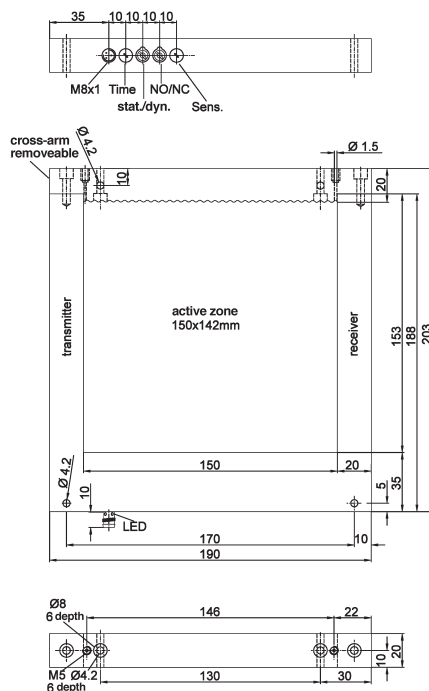|		
active zone	70x62mm	100x92mm
resolution	dynamic Ø 1.5mm / static Ø 2.0mm	dynamic Ø 2.5mm / static Ø 3.0mm
output signal	pnp, no/nc	pnp, no/nc
operating voltage	18 ... 35V DC	18 ... 35V DC
current consumption (w/o load)	≤ 30mA	≤ 35mA
output current (max. load)	200mA	200mA
voltage drop (max. load)	2.5V DC	2.5V DC
transmitting element (pulsed)	LED, infrared light	LED, infrared light
wavelength	880nm	880nm
response/decay time	0.1ms / 0.1 ... 150ms	0.1ms / 0.1 ... 150ms
display (signal)	yellow LED	yellow LED
sensitivity adjustment	potentiometer	potentiometer
time adjustment	potentiometer 0.1 ... 150ms	potentiometer 0.1 ... 150ms
adjustment	change-over switch stat./dyn. and no/nc	change-over switch stat./dyn. and no/nc
short-circuit protection	+	+
reverse polarity protection	+	+
dimensions	123x110x20mm	153x140x20mm
housing material	aluminum	aluminum
lens material	plastic PMMA	plastic PMMA
operating temperature	0 ... +60°C	0 ... +60°C
degree of protection (EN 60529)	IP67	IP67
connection	M8-connector, 3-pin	M8-connector, 3-pin
connection accessories	e.g. **VK200071**	e.g. **VK200071**

article-no.	OHKE0370	OHLE0370
active zone	**150x142mm**	**250x242mm**

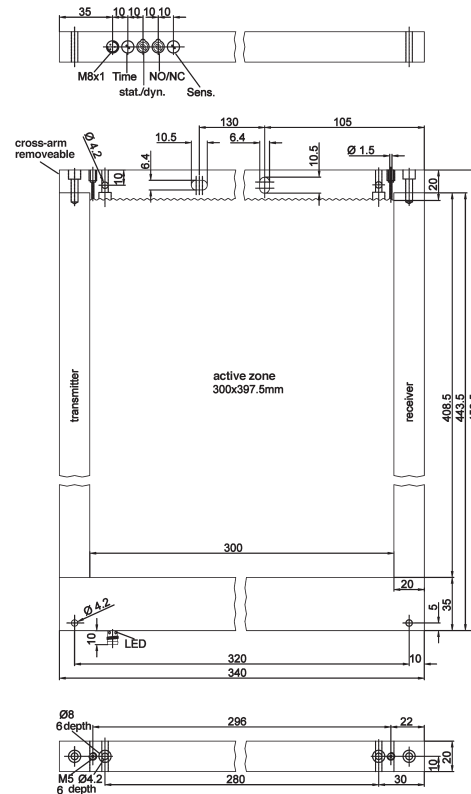## TECHNICAL DATA

active zone	150x142mm	250x242mm
resolution	dynamic Ø 3.0mm / static Ø 5.0mm	dynamic Ø 5.0mm / static Ø 8.0mm
output signal	pnp, no/nc	pnp, no/nc
operating voltage	18 ... 35V DC	22 ... 26V DC
current consumption (w/o load)	≤ 45mA	≤ 45mA
output current (max. load)	200mA	200mA
voltage drop (max. load)	2.5V DC	2.5V DC
transmitting element (pulsed)	LED, infrared light	LED, infrared light
wavelength	880nm	880nm
response/decay time	0.1ms / 0.1 ... 150ms	0.1ms / 0.1 ... 150ms
display (signal)	yellow LED	yellow LED
sensitivity adjustment	potentiometer	potentiometer
time adjustment	potentiometer 0.1 ... 150ms	potentiometer 0.1 ... 150ms
adjustment	change-over switch stat./dyn. and no/nc	change-over switch stat./dyn. and no/nc
short-circuit protection	+	+
reverse polarity protection	+	+
dimensions	203x190x20mm	303x290x20mm
housing material	aluminum	aluminum
lens material	plastic PMMA	plastic PMMA
operating temperature	0 ... +60°C	0 ... +60°C
degree of protection (EN 60529)	IP67	IP67
connection	M8-connector, 3-pin	M8-connector, 3-pin
connection accessories	e.g. **VK200071**	e.g. **VK200071**

article-no.	**OHM00370**
active zone	**300x397.5mm**

TECHNICAL DATA

active zone	300x397.5mm
resolution	dynamic Ø 5.0mm / static Ø 10.0mm
output signal	pnp, no / nc
operating voltage	22 ... 26V DC
current consumption (w/o load)	≤ 50mA
output current (max. load)	200mA
voltage drop (max. load)	2.5V DC
transmitting element (pulsed)	LED, infrared light
wavelength	880nm
response/decay time	0.1ms / 0.1 ... 150ms
display (signal)	yellow LED
sensitivity adjustment	potentiometer
time adjustment	potentiometer, 0.1 ... 150ms
adjustment	change-over switch stat./dyn. and no/nc
short-circuit protection	+
reverse polarity protection	+
dimensions	459x340x20mm
housing material	aluminum
lens material	plastic PMMA
operating temperature	0 ... +60°C
degree of protection (EN 60529)	IP67
connection	M8-connector, 3-pin
connection accessories	e.g. **VK200071**

connection

PNP

bn — +Vs
bu — 0V
bk — Z — Output

no / nc
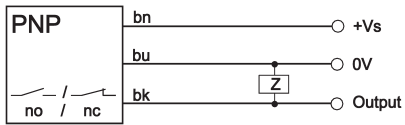
wire colors: bn = brown (1), bu = blue (3), bk = black (4)

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

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.