

dimensions **35 x 664 x 41mm**
to
35 x 1364 x 41mm

body protection light beam height (top) **500mm**
 800mm
 900mm
 1200mm



- ✓ access security
- ✓ 2,3 or 4 light beams
- ✓ integrated EDM-function
- ✓ manuel or automatic restart
- ✓ integrated alignment mark
- ✓ short response time
- ✓ simple installation and setup
- ✓ compact section measurements
- ✓ automatic self-test
- ✓ connection with M12-connector

**body protection, performance level e,
safety integrity level 3, category 4**



description

Corresponding with the applicable standards (see page 3), these light curtains for securing danger zones are especially suited to situations where body protection is required for the operator.

Resulting from the installation height of the 1st light axis, different models are available with access security heights of 515, 815, 915 and 1,215mm. According to the model, the number of light axes varies between 2, 3 and 4 beams, wherein a range of up to 50m is achieved.

On the front side of the receiver, there is an easy to open flap behind which there is a DIP switch. The integrated functions can be activated and configured with it.

A new feature is the EDM function with which the function of the signal convertor can be monitored. For this reason, there is also a new safety relay with an additional break

contact, which is available under number **AO000299**.

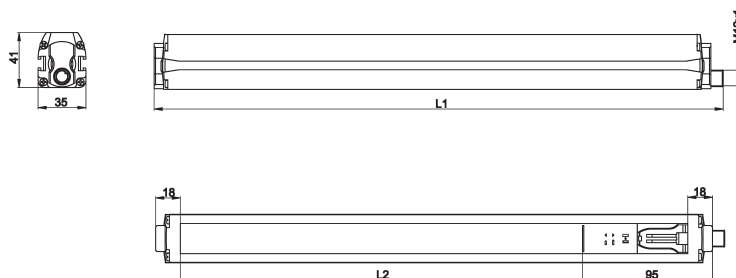
The system can be configured according to the safety requirements. The transmitting and receiving units are optically synchronized. Along with all control switching circuits, all inputs and outputs are located inside the housing. Thanks to the compact dimensions and the easy connection and installation technology, this series of light curtains offers the user optimum protection in all industrial safety applications.

Application examples

Securing access in the danger zone of ...

- ▶ transportation systems
- ▶ stacking devices
- ▶ packing machines

article-no..	OY360110	OY360111	OY360112	OY360113
number of beams	2	3	4	4
response time	16msec	16msec	16msec	16msec
beam spacing	500mm	400mm	300mm	400mm
resolution	515mm	415mm	315mm	415mm
overall length L1	664mm	964mm	1064mm	1364mm
optical range L2	538mm	838mm	938mm	1238mm
installation height 1st light axis	400mm	300mm	300mm	300mm

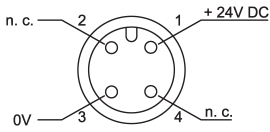


TECHNICAL DATA

resolution	see above
sensing range	0.5 ... 50m
output signal	2 x pnp, no
operating voltage	24V DC ± 20%
current consumption	transmitter: ≤ 30mA
current consumption (w/o load)	receiver: ≤ 75mA
output current (max. load)	max. 500mA at each output
transmitting element (pulsed)	infrared LED, 880nm
functions	test; manual/automatic reset; EDM; reset
display (transmitter)	'normal OP' LED: green, 'transmitter on' LED: yellow
display (receiver)	'normal OP' LED: green, 'break' LED: red, 'alignment' 2 LED: yellow
short-circuit protection	+
reverse polarity protection	+
dimensions	35 x L1 x 41
housing material	aluminium painted
material (screen)	PMMA
operating temperature	0 ... +55°C
storage temperature	-25 ... +70°C
humidity	15 ... 95%, non condensing
system of protection (EN 60529)	IP65
safety category	type 4
prtection class	class 1
connection	transmitter: M12-connector, 4-pin / receiver: M12-connector, 8-pin
connection accessories	transmitter: e.g. VK205325 / receiver: e.g. VK205A25
mounting accessories	mounting brackets AO000106 included in the scope of delivery - further information see separate data sheet

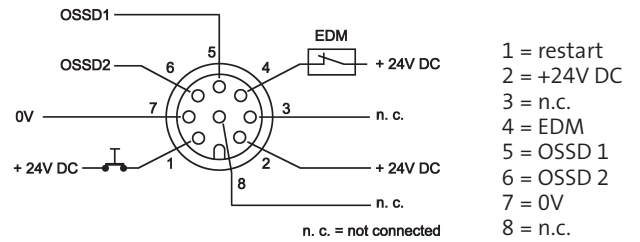
connection

transmitter



wire colors: bn = brown (1), wh = white (2), bu = blue (3),
bk = black (4)

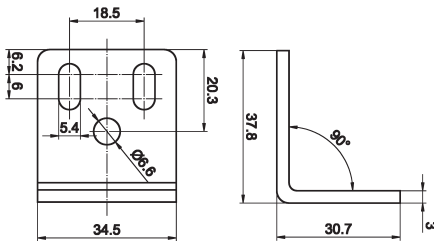
receiver



wire colors: wh = white (1), bn = brown (2), gr = green (3),
ye = yellow (4), gy = grey (5), pk = pink (6),
bu = blue (7), rd = red (8)

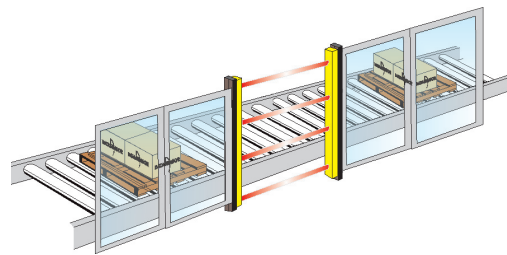
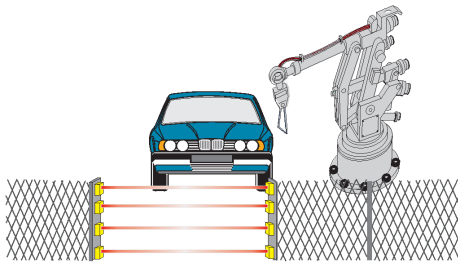
accessories bracket AO000106

sufficient number for light curtain included in the scope of delivery



application example

danger point security in automated work areas



STANDARDS

IEC 61496-1	safety of machines part 1	
IEC 61496-2	safety of machines part 2	
EN ISO 13849-1	PL	e
EN 954-1	CAT	4
EN IEC 61508	SIL	3
EN IEC 62061	SIL CL	3
probability of dangerous failure per hour	PFHd min (1/h)	2.62×10^{-9}
life / mission time	T1 (years)	20
mean value operating time without dangerous failure	MTTFd (years)	384
diagnostic coverage	DC	98.90%
safe failure fraction	SFF	99.38%
hardware fault tolerance	HFT	1

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".

You also find this data sheet, as well as contact details under www.ipf-electronic.com

notes

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