



design 8 x 12 x 58mm 8 x 12 x 67mm

through-beam sensors dif. reflection sensors

operating distance sensing range

2.5m 40mm 80mm



- ✓ LED-display
- ✓ integrated amplifier
- ✓ short-circuit and reverse polarity protection
- √ high sampling frequency and sensing ranges
- ✓ connection with cable or M8-connector

intensity differentiation robust metal housing











description

These days, optoelectronic sensors are indispensable components in many automated manufacturing processes. They are used everywhere where parts have to be more reli-

ably detected in a way which is fast and without contact, or have to be counted, measured or positioned.

The devices feature an aluminum housing and are often used in connection with a PLC for automatic production processes and machines. Through-beam sensors pick up objects of any shape, regardless of their color.

Among other things, diffuse reflection sensors which can differentiate intensity are suited to differentiating white / black in objects.

If, in the case of the receivers of through-beam sensors or

diffuse reflection sensors the red LED flashes when the output is switched, the respective device is working without sufficient functional reserve, e.g. due to soiling or maladjustment.

The red LED display lights up if the output is securely switched.

application examples

- checking the presence of various objects
- avoiding collision, in the case of feeding movements
- monitoring of object heights and pile heights
- ▶ limit switches, position switches and pulse generators





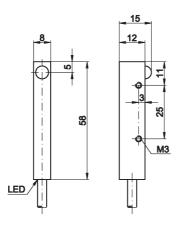


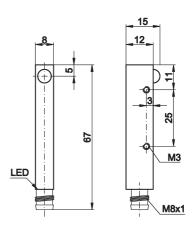
optical sensors

2900 through-beam sensors, dif. reflection sensors



article-no.	OE110100	OE110170
version	receiver / through-beam sensor	receiver / through-beam sensor
connection	cable	connector
operating distance (operating)	2.5m	2.5m





TECHNICAL DATA

operating distance (limit)	3.0m	3.0m
output signal	pnp, dark-on mode	pnp, dark-on mode
operating voltage	10 30V DC	10 30V DC
current consumption (w/o load)	≤ 25mA	≤ 25mA
output current (max. load)	100mA	100mA
voltage drop (max. load)	2.0V DC	2.0V DC
transmitting element (pulsed)	-	
wave length (transmitter)	-	-
response / decay time	< 2.5msec	< 2.5msec
display (signal / reserve)	red LED / red LED flashing	red LED / red LED flashing
sensitivity adjustment	-	-
test input	-	
short-circuit protection	+	+
reverse polarity protection	+	+
design	8x12x58mm	8x12x67mm
housing material	aluminium	aluminium
lens material	plastic PC	plastic PC
operating temperature	-25 +65°C	-25 +65°C
system of protection (EN 60529)	IP65	IP65
connection	2m PVC-cable, 3-wire	M8-connector, 3-pin
connection accessories	-	e.g. VK200071 , 2m





article-no. version connection operating distance (operating)	OS110000 transmitter / through-beam sensor cable -	OS110070 transmitter / through-beam sensor connector -
	15 12 12 M3	15 12 12 13 18 18 18 18 18 18 18 18 18 18 18 18 18
TECHNICAL DATA		
operating distance (limit) output signal	-	-
operating voltage	10 30V DC	10 30V DC
current consumption (w/o load) output current (max. load)	≤ 50mA -	≤ 50mA
voltage drop (max. load)	-	-
transmitting element (pulsed)	LED, infrared light	LED, infrared light
wave length (transmitter)	880nm	880nm
response / decay time	·	·
display (signal / reserve) sensitivity adjustment	-	
test input	- -	- -
short-circuit protection	-	
reverse polarity protection	+	+
design	8x12x58mm	8x12x67mm
housing material	aluminium	aluminium
lens material	plastic PC -25 +65°C	plastic PC -25 +65°C
operating temperature system of protection (EN 60529)	-25 +65 C	-25 +05 C IP65
connection	2m PVC-cable, 3-wire	M8-connector, 3-pin
connection accessories	-	e.g. VK200071 , 2m

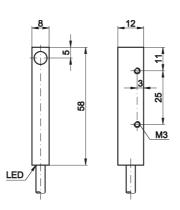


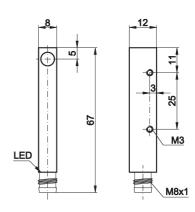






article-no.	OT110100	OT110170
version	dif. reflection sensor, intensity	dif. reflection sensor, intensity
connection	cable	connector
sensing range	40mm	40mm
article-no.	OT110105	OT110175
version	dif. reflection sensor, intensity	dif. reflection sensor, intensity
connection	cable	connector
sensing range	80mm	80mm





TECHNICAL DATA

sensing range	see above	see above
output signal	pnp, light-on mode	pnp, light-on mode
operating voltage	10 30V DC	10 30V DC
current consumption (w/o load)	≤ 40mA	≤ 40mA
output current (max. load)	100mA	100mA
voltage drop (max. load)	2.0V DC	2.0V DC
transmitting element (pulsed)	LED, infrared light	LED, infrared light
wave length (transmitter)	880nm	880nm
response / decay time	1msec	1msec
display (signal / reserve)	red LED / red LED flashing	red LED / red LED flashing
sensitivity adjustment	-	-
interference supression	+	+
short-circuit protection	+	+
reverse polarity protection	+	+
design	8x12x58mm	8x12x67mm
housing material	aluminium	aluminium
lens material	plastic PC	plastic PC
operating temperature	-25 +65°C	-25 +65°C
system of protection (EN 60529)	IP65	IP65
connection	2m PVC-cable, 3-wire	M8-connector, 3-pin
connection accessories	-	e.g. VK200071 , 2m

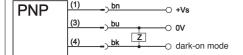




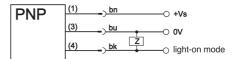


connection

cable / connector devices, receiver through-beam sensor



cable / connector devices, dif. reflection sensor



cable / connector devices, transmitter through-beam sensor



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

The list of articles 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.



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