

### THROUGH-BEAM, RETRO-REFLECTIVE, DIF. REFLECTION SENSORS 1900

dimensions 15 x 30 x 30mm

through-beam sensors retro-reflective sensors dif. reflection sensor operating range operating range sensing range

up to 12m up to 4m up to 1200mm

to 4m 00mm



- √ high sampling frequency
- √ large operating ranges
- ✓ LED-display for switch signal and tolerance of the functional reserve
- √ devices with alarm output
- √ also with exclusive-OR switching output
- √ connection with M8-connector or cable
- √ glass fiber reinforced plastic housing

diffuse reflection with triangulation retro-reflective with polarizing filter











### description

The optical sensors of this series have compact dimensions and a robust housing. Due to their small design they can be applied in areas with small installation space.

These devices have a sensitivity adjustment by means of the potentiometer attached to the rear side.

Instead of this, the transmitters of the through-beam sensors provide an opportunity to monitor the functions of the sensor pair via a test input. For this purpose, the 0V potential (GND) of the voltage supply is applied to the corresponding contact (4/bk) of the transmitter. This will deactivate the transmitting diode. By evaluation of the receiver signal in the control, the basic alignment of the transmitter to the receiver can also be checked.

The versions with alarm signal interconnect the corresponding output if the safe switching range of the functional reserve is left.

Optionally, the devices are available with fixed connection cable or with M8-connector (3- or 4-pin).

The retro-reflective sensors have a transmitting element working with visible red light. This will considerably simplify the adjustment and the alignment to the object to be detected and to the reflector. The diffuse reflection sensors for the close-up range (up to 150mm) also work with red light.

In addition, their independence of the sensing range relating to color and structure of the object surfaces is excellent. This is achieved by the principle of triangulation, which also obtains good background suppression.

#### application examples

- reliable positioning tasks in automation technology
- presence checking by detection of different objects
- monitoring and edge detection of object and stacking heights
- contactless position recognition of small and large parts



article-no.	OE150105	OE150175	OE150275
arπcie-no. version	through-beam sensor	through-beam sensor	through-beam sensor
version	receiver	receiver	receiver
output signal	pnp, dark-on mode	pnp, dark-on mode	pnp, light-on mode
connection	cable	M8-connector	M8-connector
article-no.	OS150005	OS150075	OS150075
version	through-beam sensor	through-beam sensor	through-beam sensor
	transmitter	transmitter	transmitter
connection	cable	M8-connector	M8-connector
operating range	6m	6m	6m
	30 21 Pot** R LED**	30 21 LED** 0 8 To LED**	30 21 LED**
TECHNICAL DATA			
operating range	6m	6m	6m
output signal**	pnp, dark-on mode	pnp, dark-on mode	pnp, light-on mode
operating voltage	10 36V DC	10 36V DC	10 36V DC
current consumption (w/o load)	≤ 15mA* / ≤ 10mA**	≤ 15mA* / ≤ 10mA**	≤ 15mA* / ≤ 10mA**
output current (max. load)**	200mA	200mA	200mA
voltage drop (max. load)**	2V DC	2V DC	2V DC
transmitting element (pulsed)*	LED, infrared light	LED, infrared light	LED, infrared light
wavelength*	880nm	880nm	880nm
readiness delay	100ms	100ms	100ms
sampling frequency**	1kHz	1kHz	1kHz
display (signal)**	yellow LED	yellow LED	yellow LED
display (functional reserve)**	green LED	green LED	green LED
sensitivity adjustment**	potentiometer	potentiometer	potentiometer
test input*	GND/0V: Pin4/bk	GND/0V: Pin4/bk	GND/0V: Pin4/bk
alarm output**	-	-	-
short-circuit protection	+	+	+
reverse polarity protection	+	+	+
dimensions	15x30x30mm	15x30x30mm	15x30x30mm
housing material	plastic PBTP	plastic PBTP	plastic PBTP
front screen material		· · · · · · · · · · · · · · · · · · ·	
	glass -25 +55°C	glass -25 +55°C	glass -25 +55°C
operating temperature	-25 +55 C IP65	-25 +55 C IP65	-25 +55 C IP65
degree of protection (EN 60529)			
connection	2m PVC-cable, 3-wire	M8-connector, 3-pin	M8-connector, 3-pin
connection accessories	-	e.g. <b>VK200075</b>	e.g. <b>VK200075</b>
mounting accessories	AO00045	A000045	AO000045
accessories (universal holder)	AY000114	AY000114	AY000114
* only transmitter ** only receiver			



version  connection  output signal	through-beam sensor receiver cable pnp, dark-on/light-on mode	through-beam sensor receiver M8-connector pnp, dark-on/light-on mode	through-beam sensor receiver M8-connector pnp, dark-on mode, alarm
article-no. version	OS150000 through-beam sensor	OS150070 through-beam sensor	OS150070 through-beam sensor
version	transmitter	transmitter	transmitter
connection	cable	M8-connector	M8-connector
operating range	12m	12m	12m
	30 21 Pot** 8 M4	30 21 Pot** LED** 8	30 21 LED**
TECHNICAL DATA			
operating range	12m	12m	12m
output signal**	pnp, dark-on/light-on mode	pnp, dark-on/light-on mode	pnp, dark-on mode, alarm
operating voltage	10 36V DC	10 36V DC	10 36V DC
current consumption (w/o load)	≤ 15mA* / ≤ 10mA**	≤ 15mA* / ≤ 10mA**	≤ 15mA* / ≤ 10mA**
output current (max. load)**	200mA	200mA	200mA
voltage drop (max. load)**	2V DC	2V DC	2V DC
transmitting element (pulsed)* wavelength*	LED, infrared light 880nm	LED, infrared light 880nm	LED, infrared light 880nm
readiness delay**	100ms	100ms	100ms
sampling frequency**	1kHz	1kHz	1kHz
display (signal)**	yellow LED	yellow LED	yellow LED
display (functional reserve)**	green LED	green LED	green LED
sensitivity adjustment**	potentiometer	potentiometer	potentiometer
test input*	GND/0V: Pin4/bk	GND/0V: Pin4/bk	GND/0V: Pin4/bk
alarm output**	-	-	+
short-circuit protection	+	+	+
reverse polarity protection	+	+	+
dimensions	15x30x30mm	15x30x30mm	15x30x30mm
housing material	plastic PBTP	plastic PBTP	plastic PBTP
front screen material	glass	glass	glass
operating temperature	-25 +55°C	-25 +55°C	-25 +55°C
degree of protection (EN 60529)	IP67	IP67	IP67
connection	3m PVC-cable, 4-wire	M8-connector, 4-pin	M8-connector, 4-pin
connection accessories		e.g. <b>VK200375</b>	e.g. <b>VK200375</b>
mounting accessories (enclosed)	AO000045	AO000045	AO000045
accessories (universal holder)	AY000114	AY000114	AY000114
* only transmitter ** only receiver			



operating range	OR150105	OR150175
operating range	2m	2m
version	retro-reflective sensor with polarizing filter	retro-reflective sensor with polarizing filter
output	pnp, dark-on mode	pnp, dark-on mode
connection	cable	M8-connector
article-no.	-	OR150275
operating range		2m
version		retro-reflective sensor with polarizing filter
output		pnp, light-on mode
connection	30 21 Pot R	M8-connector
operating range	2m pnp, dark-on mode	2m see above
operating range output signal		
operating range output signal operating voltage	pnp, dark-on mode	see above
operating range output signal operating voltage current consumption (w/o load)	pnp, dark-on mode 10 36V DC	see above 10 36V DC
operating range output signal operating voltage current consumption (w/o load) output current (max. load)	pnp, dark-on mode 10 36V DC ≤ 15mA	see above  10 36V DC  ≤ 15mA
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load)	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC	see above  10 36V DC  ≤ 15mA  200mA  2V DC
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed)	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal)	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve)	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) cransmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment elarm output short-circuit protection	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + +	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + +
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material operating temperature	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + +  15x30x30mm  plastic PBTP  glass -25 +55°C	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + +  15x30x30mm  plastic PBTP  glass -25 +55°C
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material operating temperature degree of protection (EN 60529)	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP65	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP65
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material operating temperature degree of protection (EN 60529) connection	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP65  2m cable, PVC, 3-wire	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP65  M8-connector, 3-pin
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material operating temperature degree of protection (EN 60529) connection connection accessories mounting accessories	pnp, dark-on mode  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP65	see above  10 36V DC  ≤ 15mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP65



operating range	4	A
version	4m retro-reflective sensor with polarizing filter	4m retro-reflective sensor with polarizing filter
output	pnp, light-on/dark-on mode	pnp, light-on/dark-on mode
connection	cable	M8-connector
article-no.	OR150700	OR150770
operating range	4m	4m
version	retro-reflective sensor with polarizing filter	retro-reflective sensor with polarizing filter
output connection	pnp, dark-on mode, alarm cable	pnp, dark-on mode, alarm M8-connector
	30 21 Pot & N	30 21 15 NA 15 NA 15
TECHNICAL DATA  operating range output signal	4m see above	4m see above
operating range		
operating range output signal operating voltage	see above	see above
operating range output signal operating voltage current consumption (w/o load)	see above 10 36V DC	see above 10 36V DC
operating range output signal operating voltage current consumption (w/o load) output current (max. load)	see above  10 36V DC  ≤ 20mA	see above  10 36V DC  ≤ 20mA
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load)	see above  10 36V DC  ≤ 20mA  200mA	see above  10 36V DC  ≤ 20mA  200mA
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed)	see above  10 36V DC  ≤ 20mA  200mA  2V DC	see above  10 36V DC  ≤ 20mA  200mA  2V DC
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) cransmitting element (pulsed) wavelength	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) cransmitting element (pulsed) wavelength readiness delay	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) cransmitting element (pulsed) wavelength readiness delay sampling frequency	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) cransmitting element (pulsed) wavelength readiness delay sampling frequency display (signal)	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) cransmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve)	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED
operating range output signal operating voltage output current (max. load) output current (max. load) output current (max. load) outlage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) varansmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) varansmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) rensitivity adjustment alarm output	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above	see above  10 36V DC  ≤ 20mA 200mA 2V DC  LED, red light 660nm 100ms 1kHz  yellow LED green LED potentiometer see above
operating range output signal operating voltage current consumption (w/o load) output current (max. load) roltage drop (max. load) rransmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) rensitivity adjustment relation output short-circuit protection	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + +	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + +
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) cransmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  +	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + + 15x30x30mm
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) cransmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment realarm output short-circuit protection reverse polarity protection dimensions rousing material	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + + 15x30x30mm	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + +
operating range output signal operating voltage current consumption (w/o load) output current (max. load) output current (max. load) output genent (pulsed) output current (max. load) output current (max. load) output current (max. load) output current (max. load) output genent (pulsed) output genent genent (pulsed) output genent genent (pulsed) output genent gene	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  +  +  +  15x30x30mm  plastic PBTP	see above  10 36V DC  ≤ 20mA 200mA 2V DC  LED, red light 660nm 100ms 1kHz yellow LED green LED potentiometer see above + + + 15x30x30mm plastic PBTP
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) varansmitting element (pulsed) vavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment short-circuit protection dimensions rousing material front screen material operating temperature	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  +  +  +  15x30x30mm  plastic PBTP  glass	see above  10 36V DC  ≤ 20mA 200mA 2V DC  LED, red light 660nm 100ms 1kHz  yellow LED green LED potentiometer see above + + + 15x30x30mm plastic PBTP glass
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) voltage drop (max. load) vavelength readiness delay sampling frequency display (signal) display (functional reserve) rensitivity adjustment relarm output short-circuit protection reverse polarity protection dimensions rousing material ront screen material operating temperature degree of protection (EN 60529)	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + +  15x30x30mm  plastic PBTP  glass -25 +55°C  IP67	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP67
operating range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material operating temperature degree of protection (EN 60529) connection	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP67  3m cable, PVC, 4-wire	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP67  M8-connector, 4-pin
operating range output signal	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + +  15x30x30mm  plastic PBTP  glass -25 +55°C  IP67	see above  10 36V DC  ≤ 20mA  200mA  2V DC  LED, red light  660nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP67



article-no. version	OT150105 dif. reflection sensor, energetic	OT150175 dif. reflection sensor, energetic	OT150400 dif. reflection sensor, energetic
sensing range	600mm	600mm	1200mm
output signal connection	pnp, light-on mode cable	pnp, light-on mode M8-connector	pnp, light-on/dark-on mode cable
article-no.	OT150205	-	OT150700
version	dif. reflection sensor, energetic		dif. reflection sensor, energetic
sensing range	600mm		1200mm
output signal	pnp, dark-on mode		pnp, light-on mode, alarm
connection	cable	·	cable
	30 21 Pot & R LED	30 21 21 Pot N	30 15 8.4 Pot S LED Pot S D LED
TECHNICAL DATA sensing range	600mm	600mm	1200mm
output signal	see above	pnp, light-on mode	see above
operating voltage	10 36V DC	10 36V DC	10 36V DC
current consumption (w/o load)	≤ 20mA	≤ 20mA	≤ 20mA
output current (max. load)	200mA	200mA	200mA
	2V DC	2V DC	2V DC
voltage drop (max. load) hysteresis	≤ 10%	≤ 10%	≤ 10%
norm trimming plate	200x200mm, white	200x200mm, white	200x200mm, white
transmitting element (pulsed)	LED, infrared light	LED, infrared light	LED, infrared light
wavelength	880nm	880nm	880nm
readiness delay	100ms	100ms	100ms
sampling frequency	1kHz	1kHz	1kHz
display (signal)	yellow LED	yellow LED	yellow LED
display (functional reserve)	green LED	green LED	green LED
sensitivity adjustment	potentiometer	potentiometer	potentiometer
alarm output	potentionietei	potentiometer -	see above
short-circuit protection	+	+	+
reverse polarity protection	•	+	+
dimensions	15x30x30mm	15x30x30mm	15x30x30mm
housing material front screen material	plastic PBTP	plastic PBTP	plastic PBTP
operating temperature	glass -25 +55°C	glass -25 +55°C	glass -25 +55°C
degree of protection (EN 60529)	-25 +55 C	-23 +33 C	-23 +33 C
connection	2m PVC-cable, 3-wire	M8-connector, 3-pin	3m PVC-cable, 4-wire
		e.g. VK200075	-
connection accessories	-	· ·	4.0000045
connection accessories mounting accessories (enclosed)	-	-	AO000045
connection accessories mounting accessories (enclosed) mounting accessories accessories (universal holder)	- AO000045 AY000114	- AO000045 AY000114	AO000045 - AY000114



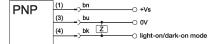
article-no.	OT150470	OT150471	OT150176
version	dif. reflection sensor, energetic	dif. reflection sensor background suppression	dif. reflection sensor background suppression
sensing range	1200mm	15150mm	15150mm
output signal	pnp, light-on/dark-on mode	pnp, light-on/dark-on mode	pnp, light-on mode
connection	M8-connector	M8-connector	M8-connector
article-no.	OT151470	-	-
version	dif. reflection sensor, energetic		-
sensing range	1200mm		
output signal	npn, light-on/dark-on mode		
connection	M8-connector	•	•
article-no.	OT150770		
version	dif. reflection sensor, energetic		
sensing range	1200mm		-
output signal connection	pnp, light-on mode, alarm M8-connector		
	30 21 8.4 Pot R	30 21 8 15 8.4 Pot R	30 21 8 4 Pot 8
TECHNICAL DATA sensing range	1200mm	15150mm	15150mm
	1200mm see above	15150mm pnp, light-on/dark-on mode	15150mm pnp, light-on mode
sensing range output signal			
sensing range output signal operating voltage	see above	pnp, light-on/dark-on mode	pnp, light-on mode
sensing range	see above	pnp, light-on/dark-on mode	pnp, light-on mode
sensing range output signal operating voltage current consumption (w/o load) output current (max. load)	see above  10 36V DC  ≤ 20mA	pnp, light-on/dark-on mode 10 36V DC ≤ 25mA	pnp, light-on mode 10 36V DC ≤ 25mA
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load)	see above  10 36V DC  ≤ 20mA  200mA	pnp, light-on/dark-on mode 10 36V DC ≤ 25mA 200mA	pnp, light-on mode 10 36V DC ≤ 25mA 200mA
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis	see above  10 36V DC  ≤ 20mA  200mA  2V DC	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal)	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms  1kHz	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve)	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms  1kHz  yellow LED	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms  1kHz  yellow LED  green LED	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms  1kHz  yellow LED  green LED  potentiometer	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection	see above  10 36V DC  ≤ 20mA 200mA 2V DC  ≤ 10%  200x200mm, white  LED, infrared light 880nm 100ms 1kHz  yellow LED green LED potentiometer see above	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  -	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  +	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED green LED potentiometer  - +	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - +
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + +	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED green LED potentiometer  - + +	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + +
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + + 15x30x30mm	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material	see above  10 36V DC  ≤ 20mA 200mA 2V DC  ≤ 10% 200x200mm, white LED, infrared light 880nm 100ms 1kHz  yellow LED green LED potentiometer see above + + + 15x30x30mm plastic PBTP	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material operating temperature	see above  10 36V DC  ≤ 20mA 200mA 2V DC  ≤ 10% 200x200mm, white  LED, infrared light 880nm 100ms 1kHz  yellow LED green LED potentiometer see above + + + 15x30x30mm plastic PBTP glass	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material operating temperature degree of protection (EN 60529)	see above  10 36V DC  ≤ 20mA 200mA 2V DC ≤ 10% 200x200mm, white LED, infrared light 880nm 100ms 1kHz yellow LED green LED potentiometer see above + + + 15x30x30mm plastic PBTP glass -25 +55°C	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED green LED potentiometer  - + + 15x30x30mm plastic PBTP glass -25 +55°C	pnp, light-on mode  10 36V DC  ≤ 25mA 200mA 2V DC  ≤ 5% 100x100mm, white  LED, red light 660nm 100ms 0.5kHz  yellow LED green LED potentiometer  - + + 15x30x30mm plastic PBTP glass -25 +55°C
sensing range output signal operating voltage current consumption (w/o load)	see above  10 36V DC  ≤ 20mA  200mA  2V DC  ≤ 10%  200x200mm, white  LED, infrared light  880nm  100ms  1kHz  yellow LED  green LED  potentiometer  see above  + + +  15x30x30mm  plastic PBTP  glass -25 +55°C  IP67	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP67	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP65
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material operating temperature degree of protection (EN 60529) connection connection accessories	see above  10 36V DC  ≤ 20mA 200mA 2V DC  ≤ 10% 200x200mm, white LED, infrared light 880nm 100ms 1kHz  yellow LED green LED potentiometer see above + + + 15x30x30mm plastic PBTP glass -25 +55°C IP67 M8-connector, 4-pin	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP67  M8-connector, 4-pin	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP65  M8-connector, 3-pin
sensing range output signal operating voltage current consumption (w/o load) output current (max. load) voltage drop (max. load) hysteresis norm trimming plate transmitting element (pulsed) wavelength readiness delay sampling frequency display (signal) display (functional reserve) sensitivity adjustment alarm output short-circuit protection reverse polarity protection dimensions housing material front screen material operating temperature degree of protection (EN 60529) connection	see above  10 36V DC  ≤ 20mA 200mA 2V DC  ≤ 10% 200x200mm, white LED, infrared light 880nm 100ms 1kHz  yellow LED green LED potentiometer see above + + + 15x30x30mm plastic PBTP glass -25 +55°C IP67  M8-connector, 4-pin e.g. VK200375	pnp, light-on/dark-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP67  M8-connector, 4-pin e.g. VK200375	pnp, light-on mode  10 36V DC  ≤ 25mA  200mA  2V DC  ≤ 5%  100x100mm, white  LED, red light  660nm  100ms  0.5kHz  yellow LED  green LED  potentiometer  - + + + 15x30x30mm  plastic PBTP  glass -25 +55°C  IP65  M8-connector, 3-pin



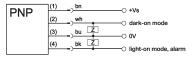
### 1900 THROUGH-BEAM, RETRO-REFLECTIVE, DIF. REFLECTION SENSORS

#### connection

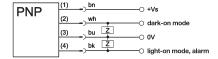
through-beam, retro-reflective, diffuse reflection sensors 3-pin



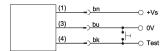
diffuse reflection sensors 4-pin



through-beam, retro-reflective, diffuse reflection sensors 4-pin



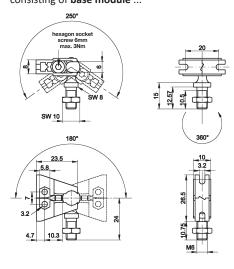
through-beam sensors, transmitter, 3- and 4-pin



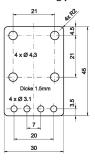
**note:** For the through-beam transmitters with test input, cable sockets with integrated LED display must not be used!! in case of 3-pin devices the wh = white (2) connection is not available

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

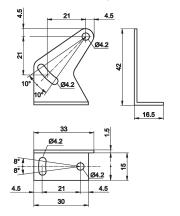
# mounting accessories (universal holder) AY000114 consisting of base module ...



### ... and fitting panel



#### AO000045 mounting bracket, metal



#### **ACCESSORIES**

article-no.	description	note
AY000088	base module *	jaw: stainless steel, ball pin: galvanized steel
AY000114	mounting kit for sensors Ox15	stainless steel
AO000045	mounting bracket for sensors Ox15	

<sup>\*</sup> The AY000088 base module is contained in every mounting kit. Material of bolts and nuts: galvanized steel.

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.

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