dimensions	**24 x 88 x 63mm**	
through-beam sensor	operating range	**20m**
retro-reflective sensor	operating range	**8m**
diffuse reflection sensor	sensing range	**1.5m**

✓ **robust plastic housing**

✓ **retro-reflective sensor with polarizing filter**

✓ **status display by LED**

✓ **LED display for functional reserve**

✓ **reverse polarity protection**

✓ **high sensing ranges**

✓ **connecting terminals**

univ. power supply with relay output turn-on/off delay
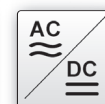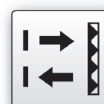
description

Optoelectronic sensors are indispensable components in all automated production processes. They are used in all applications where parts are to be detected, counted, measured or positioned in a way which does not involve contact and which is reliable and fast.

The devices feature a plastic housing and are used for automatic production processes and machines. For example, they detect objects made from metal, glass, plastic, wood and paper.

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

application examples

▶ distance control

▶ position recognition

▶ color-independent object recognition

2700 through-beam, retro-reflective, dif. reflection sensors

article-no.	OE255800	OS255000
version	receiver / through-beam sensor	transmitter / through-beam sensor
operating range	20m	-

* optical axis: 10mm
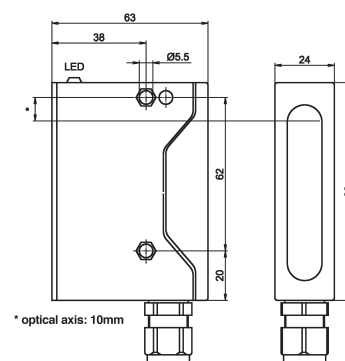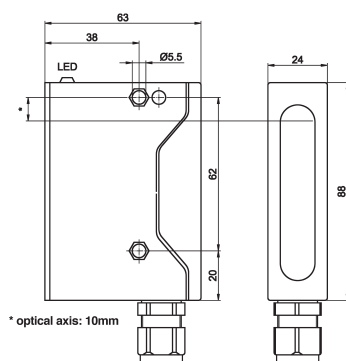
TECHNICAL DATA

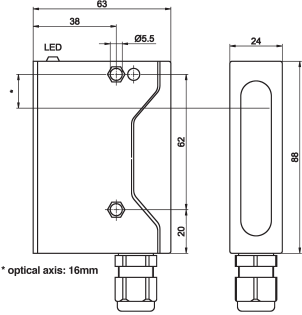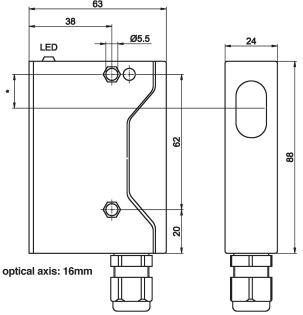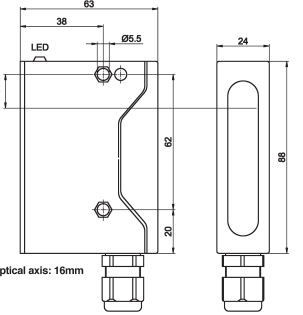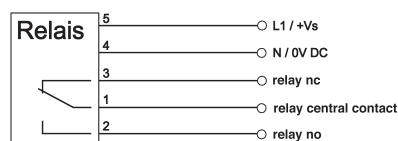|		
operating range	20m	-
output signal	relay, 1 change-over contact	-
operating voltage	12 ... 265V AC/DC	12 ... 265V AC/DC
current consumption (w/o load)	≤ 10mA	≤ 10mA
output current (max. load)	3A	-
transmitting element (pulsed)	-	LED, infrared light
wavelength (transmitter)	-	880nm
hysteresis	< 10%	-
repeat accuracy	10%	-
recovery time	< 60ms	< 60ms
turn-on delay	0 ... 10s, adjustable by potentiometer	-
turn-off delay	0 ... 8s, adjustable by potentiometer	-
sampling frequency	max. 50Hz	-
readiness delay	< 60ms	-
turn-on delay	≤ 10ms	-
display (signal/operation)	yellow LED / -	- / green LED
sensitivity adjustment	+	-
short-circuit protection	-	-
reverse polarity protection	+	+
dimensions	24x88x63mm	24x88x63mm
housing material	PA 6.6	PA 6.6
front screen material	PA 12	PA 12
operating temperature	-20 ... +70°C	-20 ... +70°C
degree of protection (EN 60529)	IP65 *	IP65 *
connection	junction box 5-pin connecting terminals	junction box 5-pin connecting terminals
mounting accessories (bracket)	AO000055	AO000055

* Only with mounted
  cable gland
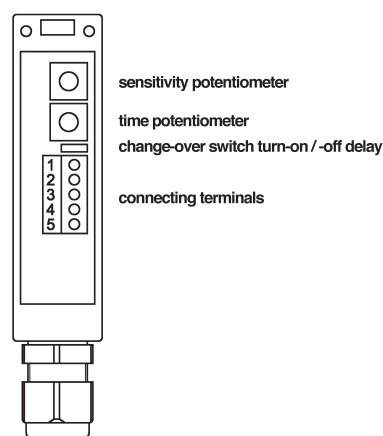 and cable

article-no.	OR255800	OR255805	OT255800
version	retro-reflective sensor	retro-reflective sensor with polarizing filter	diffuse reflection sensor
operating range / sensing range	**8m**	**6m**	**1.5m**

* optical axis: 16mm

TECHNICAL DATA

	OR255800	OR255805	OT255800
operating range/sensing range	8m	6m	1.5m
output signal	relay, 1 change-over contact	relay, 1 change-over contact	relay, 1 change-over contact
operating voltage	12 ... 265V AC/DC	12 ... 265V AC/DC	12 ... 265V AC/DC
current consumption (w/o load)	≤ 10mA	≤ 10mA	≤ 10mA
output current (max. load)	3A	3A	3A
transmitting element (pulsed)	LED, infrared light	LED, infrared light	LED, infrared light
wavelength (transmitter)	880nm	880nm	880nm
hysteresis	< 10%	< 10%	< 10%
repeat accuracy	10%	10%	5%
recovery time	< 60ms	< 60ms	< 60ms
turn-on delay	0 ... 10s, adjustable by potentiometer	0 ... 10s, adjustable by potentiometer	0 ... 10s, adjustable by potentiometer
turn-off delay	0 ... 8s, adjustable by potentiometer	0 ... 8s, adjustable by potentiometer	0 ... 8s, adjustable by potentiometer
sampling frequency	max. 50Hz	max. 50Hz	max. 50Hz
readiness delay	< 60ms	< 60ms	< 60ms
turn-on delay	≤ 10ms	≤ 10ms	≤ 10ms
display (signal/operation)	yellow LED / -	yellow LED / -	yellow LED / -
sensitivity adjustment	+	+	+
short-circuit protection	-	-	-
reverse polarity protection	+	+	+
dimensions	24x88x63mm	24x88x63mm	24x88x63mm
housing material	PA 6.6	PA 6.6	PA 6.6
front screen material	PA 12	Glas	PA 12
operating temperature	-20 ... +70°C	-20 ... +70°C	-20 ... +70°C
degree of protection (EN 60529)	IP65 *	IP65 *	IP65 *
connection	junction box 5-pin connecting terminals	junction box 5-pin connecting terminals	junction box 5-pin connecting terminals
mounting accessories (bracket)	**AO000055**	**AO000055**	**AO000055**

* Only with mounted
  cable gland
  and cable

connection

receiver, retro-reflective sensor, diffuse reflection sensor
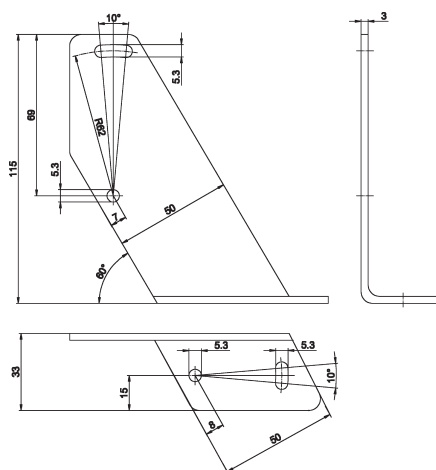
Relais

5 ○ L1 / +Vs
4 ○ N / 0V DC
3 ○ relay nc
1 ○ relay central contact
2 ○ relay no

transmitter

5 ○ L1 / +Vs
4 ○ N / 0V
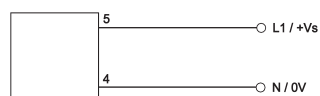
connecting terminals and operator controls

sensitivity potentiometer

time potentiometer
change-over switch turn-on / -off delay

connecting terminals

mounting bracket AO000055

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

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