BERNSTEIN
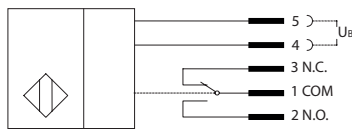
Photoelectric Sensors
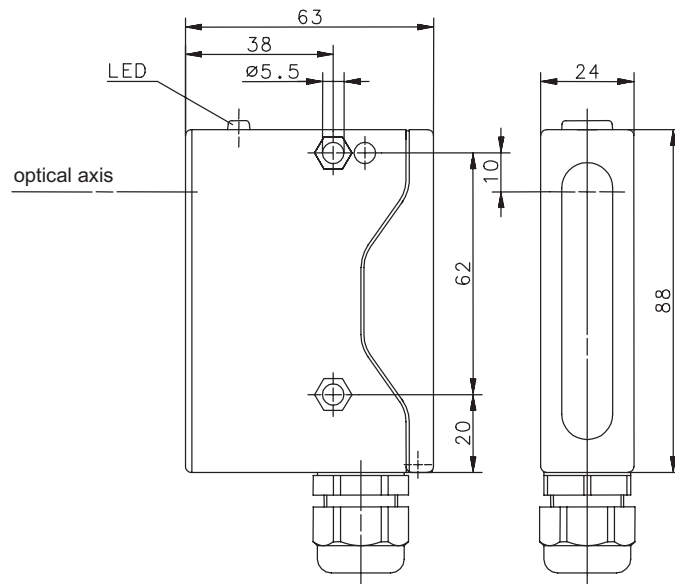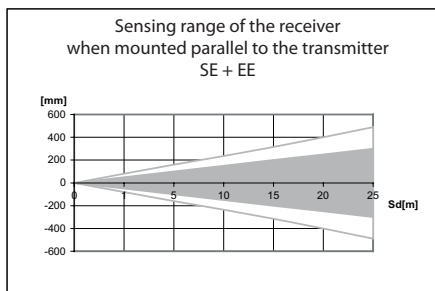## Series OR20

Description **OR20EE-MAR5-20.0-ALET**	Article number **6551686004**

Wiring Diagram

5 ⟩ U_B
4 ⟩
3 N.C.
1 COM
2 N.O.

Sensing range

Sensing range of the receiver
when mounted parallel to the transmitter
SE + EE

[mm]
600
400
200
0
-200
-400
-600
0   5   10   15   20   25   Sd[m]

Instruction

Snap lock-cover

BERNSTEIN
OR20.....
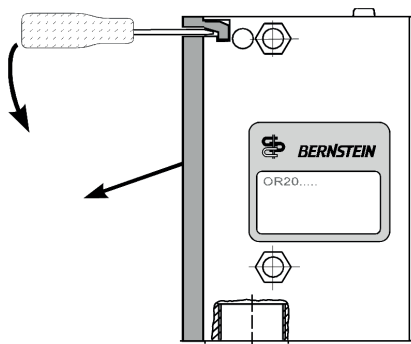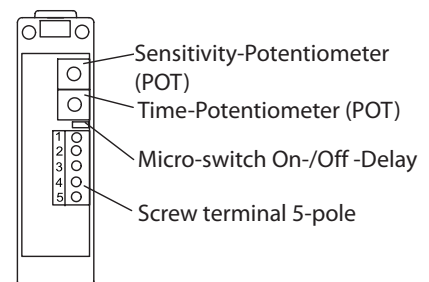
Place screwdriver into slot in rear cover.
Press down on screwdriver handle, at the
same time as levering the cover open.

63
38
ø5.5
LED
24
optical axis
10
62
88
20

Screw-cap enclosure

Control elements

Sensitivity-Potentiometer
(POT)
Time-Potentiometer (POT)
Micro-switch On-/Off -Delay
Screw terminal 5-pole

Cover with 2 srews for fixing.
Enclosure with M16x1,5 cable gland.

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Identifying characteristics in accordance with EN 60947-5-2

Electrical data		
Sensing range	S_d	EE 20 m (adjustable)
Transmitter		Infrared 880 nm
Switching element function		Relay, change over contact
Repeat accuracy	R	≤ 10 %
Differential travel (hysteresis)	H	≈ 10 %
Operational voltage range	U_B	12-265 V AC/DC, 50/60 Hz
Rated insulation voltage	U_i	250 V
Rated impulse withstand voltage	U_{imp}	1500 V
Utilization category		AC-140
Minimum operational current	I_m	1 mA
Off-state current	I_r	≤ 0,1 mA
No-load supply current	I_o	< 30 mA (activated), < 10 mA (not activated); U_B = 24 V DC
Max. rated output current		3 A at 230 V AC
Ambient light proof		10 kLux
Short-circuit protection		External SCPD: 3 A slow-blow fuse
Frequency of operating cycles	f	> 50 Hz
Rated supply frequency		50-60 HZ
False polarity protection		yes
Time delay before availability	t_v	< 60 ms
Turn on time	t_{on}	≤ 10 ms
On-Delay		0 ... 10s (selectable, adjustable with potentiometer)
Off-Delay		0 ... 8s (selectable, adjustable with potentiometer)

Mechanical Data	
Enclosure	PA 6.6, red
Cover	PA 6.6, black
Beam-output	PA 12
Ambient air temperature	-20 °C ... +70 °C
Type of protection	IP65 (only with it's mounted cable gland and cable)
Pollution degree	3 (Pollution of the optic can cause impairments of the operating distances.)
Indication	LED yellow
Termination type	Screw-type terminals (5-pole); Cable cross-section: single core 0,2 mm² ... 4 mm², multi strand 0,2 mm² … 2,5 mm² Cable gland M16x1,5: cable with outer diameter Ø 5-10 mm

EU Conformity
acc. to directive 2014/30/EU (EMC-Directive)

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