

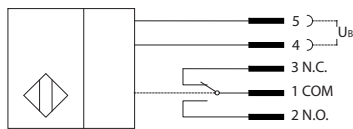
# Photoelectric Sensors

## Series OR20

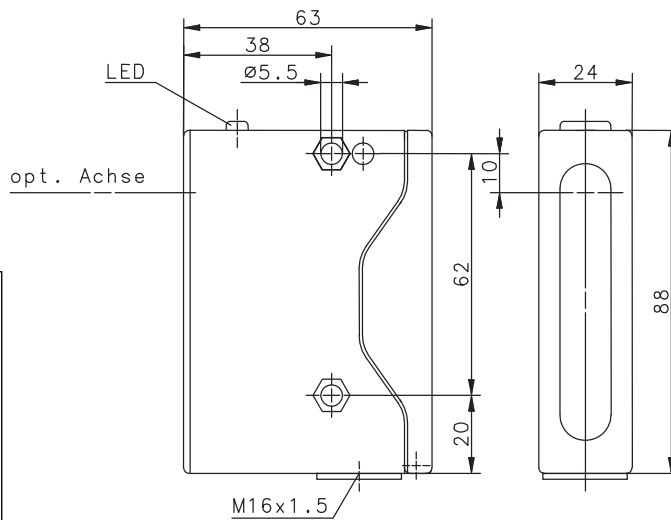
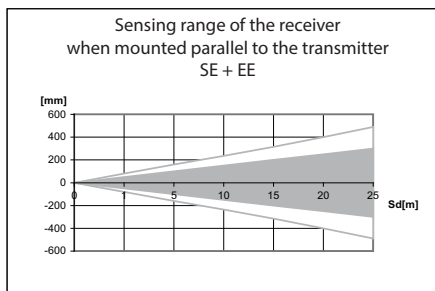
Description **OR20EE-MAR5-20.0-ALET**

Article number **6551686003**

### Wiring Diagram

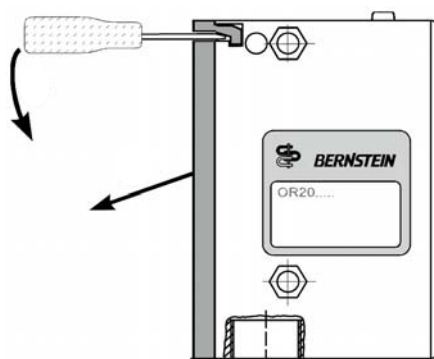


### Sensing range



### Instruction

#### Snap lock-cover



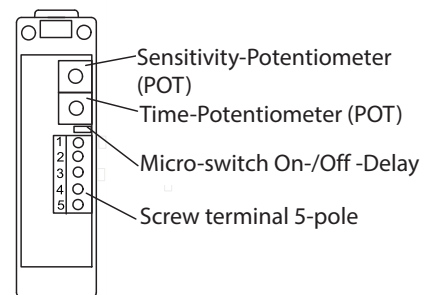
Place screwdriver into slot in rear cover. Press down on screwdriver handle, at the same time as levering the cover open. Enclosure with M16x1,5 blind plug.

#### Screw-cap enclosure



Cover with 2 screws for fixing

#### Control elements



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	$\leq 10 \%$
Differential travel (hysteresis)	H	$\approx 10 \%$
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	$I_r$	$\leq 0,1$ 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	$t_{on}$	$\leq 10$ ms
On-Delay		0 ... 10s (selectable, adjustable with potentiometer)
Off-Delay		0 ... 8s (selectable, adjustable with potentiometer)

Electromagnetic compatibility (EMC)		
Electromagnetic field test	IEC 61000-4-3	3 V/m
Electrostatic discharge test	IEC 61000-4-2	8 kV
Electrical fast transient immunity test (Burst)	IEC 61000-4-4	2 kV
Impulse voltage withstand ability (Surge)	IEC 61000-4-5	1000 V, 1,2/50 $\mu$ s @ $R_i = 2 \Omega$
Radiated disturbance field strength	EN 55011	$\leq 40$ dB ( $\mu$ V/m)

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
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 mm <sup>2</sup> ... 4 mm <sup>2</sup> , multi strand 0,2 mm <sup>2</sup> ... 2,5 mm <sup>2</sup>

EU Conformity
acc. to directive 2004 / 108 / EC