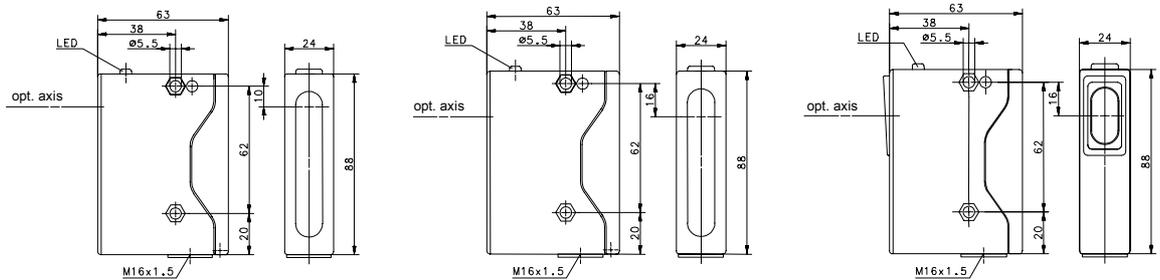


Series OR20 - DC



Sensors with snap lock-cover and M16x1,5-thread (Switching element function = PNP light activation (L.A.) / dark activation (D.A.) programmable)		
Sensing range	PA 12 – Front cap	PA 66 - Front cap with glass lens
RT 600mm var.	6557886001	
RT 1500mm var.	6557886003	
RH 60 - 400mm var.	6558886002	
RS 8m var.	6554886001	
PS 6m var.		
	Through beam sensors	6555886001
EE 20m var.	6551886003	
SE	6551086003	

Abbreviations:

RT	=	Diffuse reflective sensor
RH	=	Diffuse reflective sensor with background suppression
RS	=	Retroreflective sensor
PS	=	Polarised retro sensor
SE	=	Through beam, transmitter only
EE	=	Through beam, receiver only
var.	=	Sensing range adjustable with potentiometer (spindle~)

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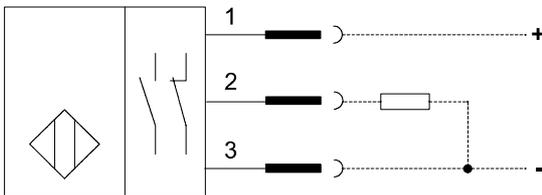
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Switching function and wiring diagrams

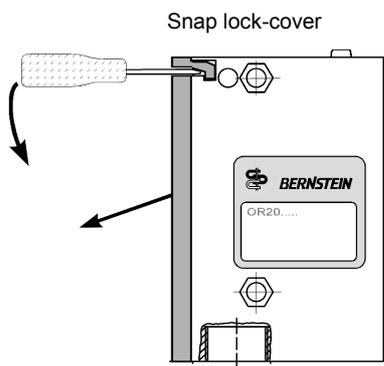
The description refers to:

Sensors	Sensing types	Mounting conditions
Diffuse reflective sensor	RT, RH	without an object inside the sensing range
Retroreflective sensor	RS, PS	without reflector
Through-beam sensor	EE	without transmitter

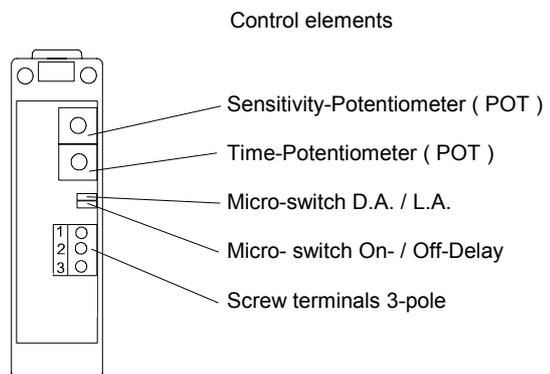
PNP – dark activation (D.A.) / light activation (L.A.) programmable



Instruction



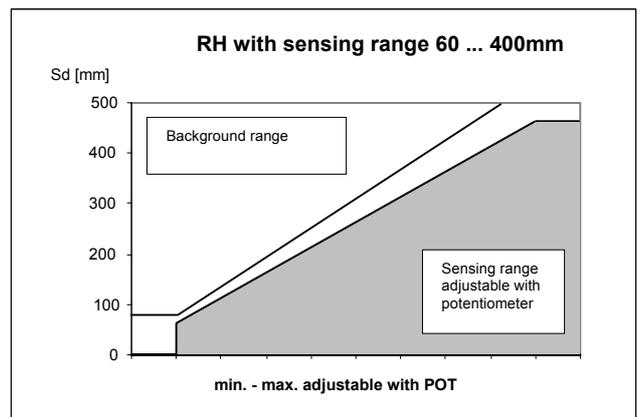
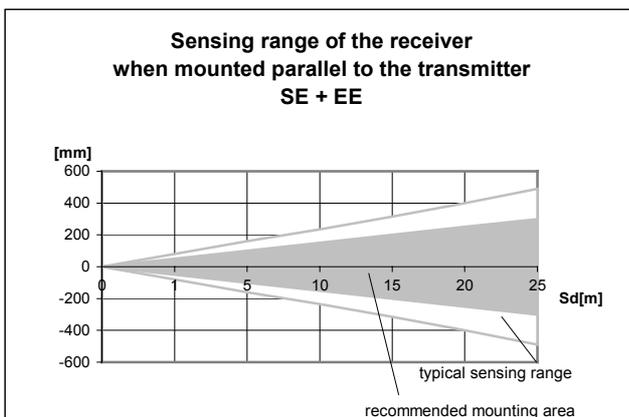
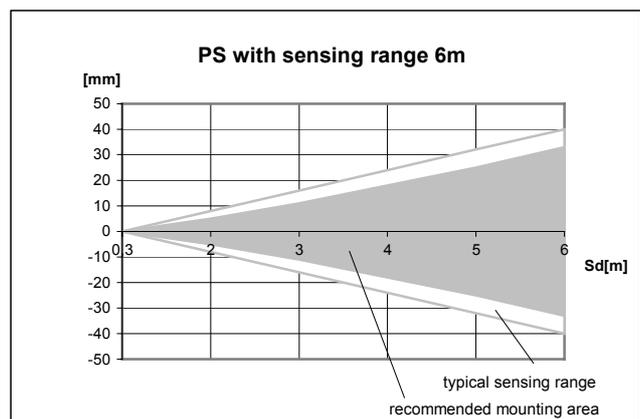
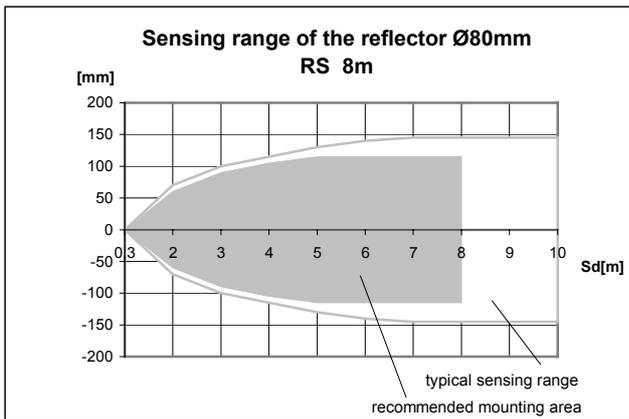
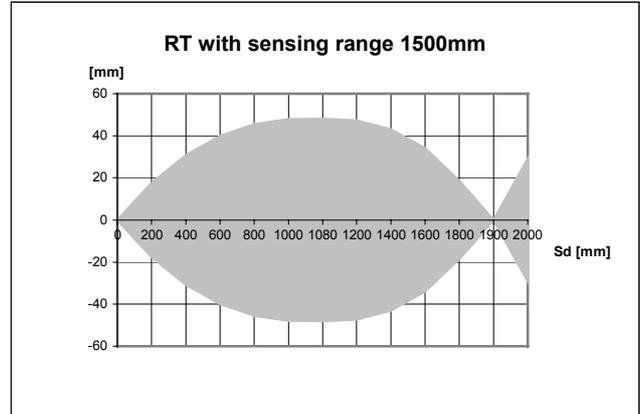
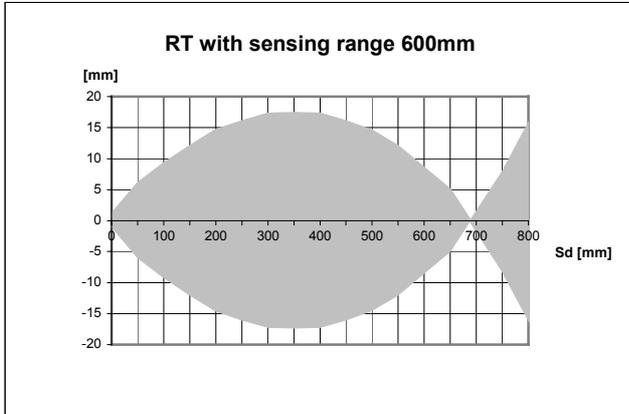
Place screwdriver into slot in rear cover. Press down on screwdriver handle, at the same time as levering the cover open.
Enclosure with M16x1,5 blind plug.



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Typical sensing range



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Identifying characteristics in accordance with EN 60947-5-2

Electrical Data		
Sensing range	S _d	see overview RT / RH = Target white 200mm x 200mm PS / RS = Reflector Ø80mm
Switching element function		programmable (L.A. / D.A.), permanent overload protection, PNP indication: LED yellow
Repeat accuracy	R	10%
Differential travel (hysteresis)	H	≈ 10%; RH ≈ 5%
Operational voltage range	U _B	10-36VDC
Rated insulation voltage	U _i	75VDC
Rated impulse withstand voltage	U _{imp}	500V
Voltage drop	U _d	≤ 1,8VDC
Utilization category		DC-13 @ I _e = 50mA and U _e = 33VDC
Rated operational current	I _e	50mA
Minimum operational current	I _m	1mA
Off-state current	I _r	< 0,1mA
No-load supply current	I _o	< 15mA, (transmitter < 20mA)
Max. rated output current		100A
Ambient light proof		200mA
Short-circuit protection		10kLux
Frequency of operating cycles		pulsed
False polarity protection	f	> 100Hz; RH > 50Hz
Time delay before availability		yes
Turn on time	t _v	< 60ms
Sensing range	t _{on}	< 6ms
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	3V/m
Electrostatic discharge test	IEC 61000-4-2	8kV
Electrical fast transient immunity test (Burst)	IEC 61000-4-4	2kV
Impulse voltage withstand ability (Surge)	IEC 61000-4-5	500V, 1,2/50µs @ Ri = 42Ω
Radiated disturbance field strength	EN 55011	≤ 40dB (µV/m)

Mechanical Data	
Enclosure	PA 6.6 red, Cover PA 6.6 black
Beam-output	PA 12
Ambient air temperature	PA 66 black; PS: Glass lens
Type of protection	-20°C ... +70°C
Pollution degree	IP65 (only with it's mounted cable gland and cable)
Indication	3 (Pollution of the optic can cause impairments of the sensing range.)
Termination type	Output LED yellow; Transmitter LED green Screw-type terminals (3-pole); Cable cross-section: single core 0,2mm ² ... 4mm ² , multi strand 0,2mm ² ... 2,5mm ²

EC-Conformity	CE
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