Technical data

Approvals

Operating and display elements

Occupancy diagram	L1

Item	Color	Extras	Note slide-in label	Version	Switching element	Slide-in label	Number	Designation1	LED
1				Illuminated pushbutton	1NO				

Electrical connection values

Rated insulation voltage U_i	30 V
Rated impulse voltage U_{imp}	1.5 kV
Discrepancy time	
between FO1A and FO1B	max. 10 ms
Utilization category	
DC-13	24V 200mA (Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.)
Risk time according to EN 60947-5-3	max. 350 ms
Risk time according to EN 60947-5-3, extension for each additional device	max. 5 ms
Safety class	III
Transponder coding	Unicode
Degree of contamination (external, according to EN 60947-1)	3
	Solenoid control input IMP1, IMP2, IMM
Test pulse duration	max. 5 ms
Test pulse interval	min. 100 ms
	Controls and indicators

Breaking capacity	max. 0.25 W
Switching voltage	U_A V
Switching current	1 ... 10 mA
LED power supply	24 V DC
	Monitoring outputs OD, OT, OL, OI
Output type	Semiconductor outputs, p-switching, short circuit-proof
Output voltage	UA-2V ... UA V DC (Value at a switching current of 50mA without taking into account the cable lengths)
Output current	max. 50 mA
	Safety outputs FO1A, FO1B
Output type	Semiconductor outputs, p-switching, short circuit-proof
Output voltage	
U_{FO1A} /U_{FO1B} LOW	0 ... 1 V DC
U_{FO1A} /U_{FO1B} HIGH	UB-2V ... UB V DC (Value at a switching current of 50mA without taking into account the cable lengths)
Output current	
per safety output FO1A / FO1B	1 ... 200 mA
Test pulse duration	max. 1 ms
Test pulse interval	min. 100 ms
	Power supply U_A
Operating voltage DC	
U_A	24 V DC -15% ... +10% ((reverse polarity protected, regulated, residual ripple<5%, PELV))
Current consumption	
I_{UA}	max. 375 mA ((with energized guard locking solenoid and unloaded outputs OD, OT, OL, OI, +20 °C, 24V))
	Power supply U_B
Operating voltage DC	
U_B	24 V DC -15% ... +10% ((reverse polarity protected, regulated, residual ripple<5%, PELV))

Current consumption	
I_{UB}	max. 80 mA ((no load on outputs))

Mechanical values and environment

Connection type	Plug connector RC18 (X6)
Installation orientation	Door hinge DIN right
Switching frequency	0.25 Hz
Storage temperature	–25 ... 70 °C
Mechanical life	
	1 x 10^6
in case of use as door stop, and 1 Joule impact energy	0.1 x 10^6
Degree of protection	IP65
Ambient temperature	
at U_B = 24 V DC	–20 ... 55 °C
Material	
Housing	Fiber glass reinforced plastic; nickel-plated die-cast zinc; stainless steel
Locking force F_{Zh}	2000 N
Guard locking principle	Open-circuit current principle

Characteristic values according to EN ISO 13849-1 and EN IEC 62061

	PL	Maximum SIL	PFH_D	Category	Mission time
Monitoring of the guard position	PL e	–	$3.7x10^{-9}$	4	20 y
Guard lock monitoring	PL e	–	$3.7x10^{-9}$	4	20 y

Miscellaneous

Product version number	V4.0.0
Additional feature	incl. lens set, ID no. 120344