

## Electrical connection values

Connection cross section	
(rigid/flexible) with cable end sleeve according to DIN 46 228/1	0.25 ... 1.5 mm <sup>2</sup>
(rigid/flexible)	0.13 ... 1.5 mm <sup>2</sup> (AWG 24 ... AWG 16))
(rigid/flexible) with cable end sleeve with collar according to DIN 46 228/1	0.25 ... 0.75 mm <sup>2</sup>
Rated insulation voltage U <sub>i</sub>	30 V
Rated impulse withstand voltage U <sub>imp</sub>	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
Safety class	III
Transponder coding	Unicode
Degree of contamination (external, according to EN 60947-1)	3

## Controls and indicators

Breaking capacity	max. 0.25 W
Switching voltage	U <sub>A</sub> V
Switching current	1 ... 10 mA
LED power supply	24 V DC

## Emergency stop

Breaking capacity	max. 0.25 W
Switching voltage	5 ... 24 V
Switching current	1 ... 100 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	$U_{FO1A} / U_{FO1B} \text{ HIGH}$ UB-2V ... UB V DC (Value at a switching current of 50mA without taking into account the cable lengths)  $U_{FO1A} / U_{FO1B} \text{ LOW}$ 0 ... 1 V DC
Output current	
per safety output FO1A / FO1B	1 ... 200 mA
Test pulse duration	max. 0.3 ms
Test pulse interval	min. 100 ms

### Power supply U<sub>A</sub>

Operating voltage DC	$U_A$ 24 V DC -15% ... +10% (reverse polarity protected, regulated, residual ripple<5%, PELV)
Current consumption	$I_{UA}$ max. 10 mA (with no load on outputs OD, OT, OL, OI)

### Power supply U<sub>B</sub>

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	Cable entries M20x1.5
Installation orientation	Door hinge DIN right

Switching frequency	0.25 Hz
Mechanical life	1 x 10 <sup>6</sup>
in case of use as door stop, and 1 Joule impact energy	0.1 x 10 <sup>6</sup>
Degree of protection	IP65
Ambient temperature	at U <sub>B</sub> = 24 V DC -20 ... +55 °C
Material	
Housing	Fiber glass reinforced plastic; nickel-plated die-cast zinc; stainless steel

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

Mission time	20 y
<b>Emergency stop</b>	
B <sub>10D</sub>	
Emergency stop	0.13 x 10 <sup>6</sup>
<b>Monitoring of the guard position</b>	
Category	4
Performance Level	PL e
PFH <sub>D</sub>	3.7 x 10 <sup>-9</sup>

## Miscellaneous

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