

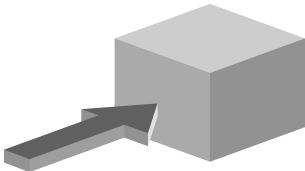
## NZ1VZ-2131E3VSE07-M (Order no. 088036)

### Safety switch NZ.VZ.VSE (guard locking, open-circuit current principle)

- ▶ Housing according to EN 50041
- ▶ Cable entry M20 x 1.5



#### Approach direction



Horizontal

Can be adjusted in 90° steps

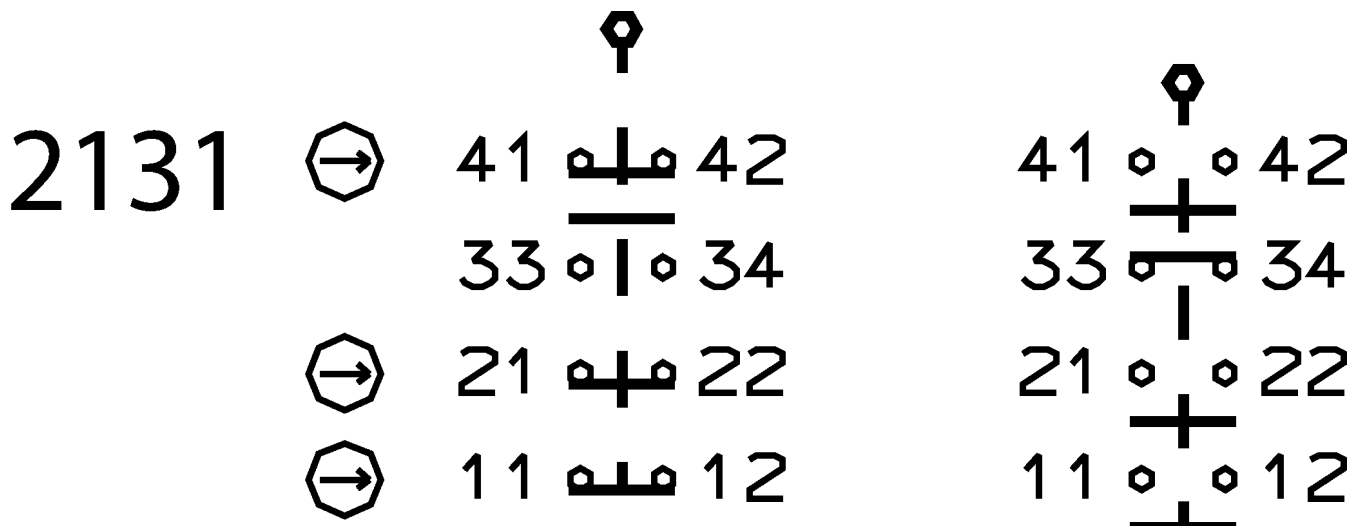
#### Guard locking type

VSE Open-circuit current principle, guard locking by applying voltage to the solenoid. Release by spring force.

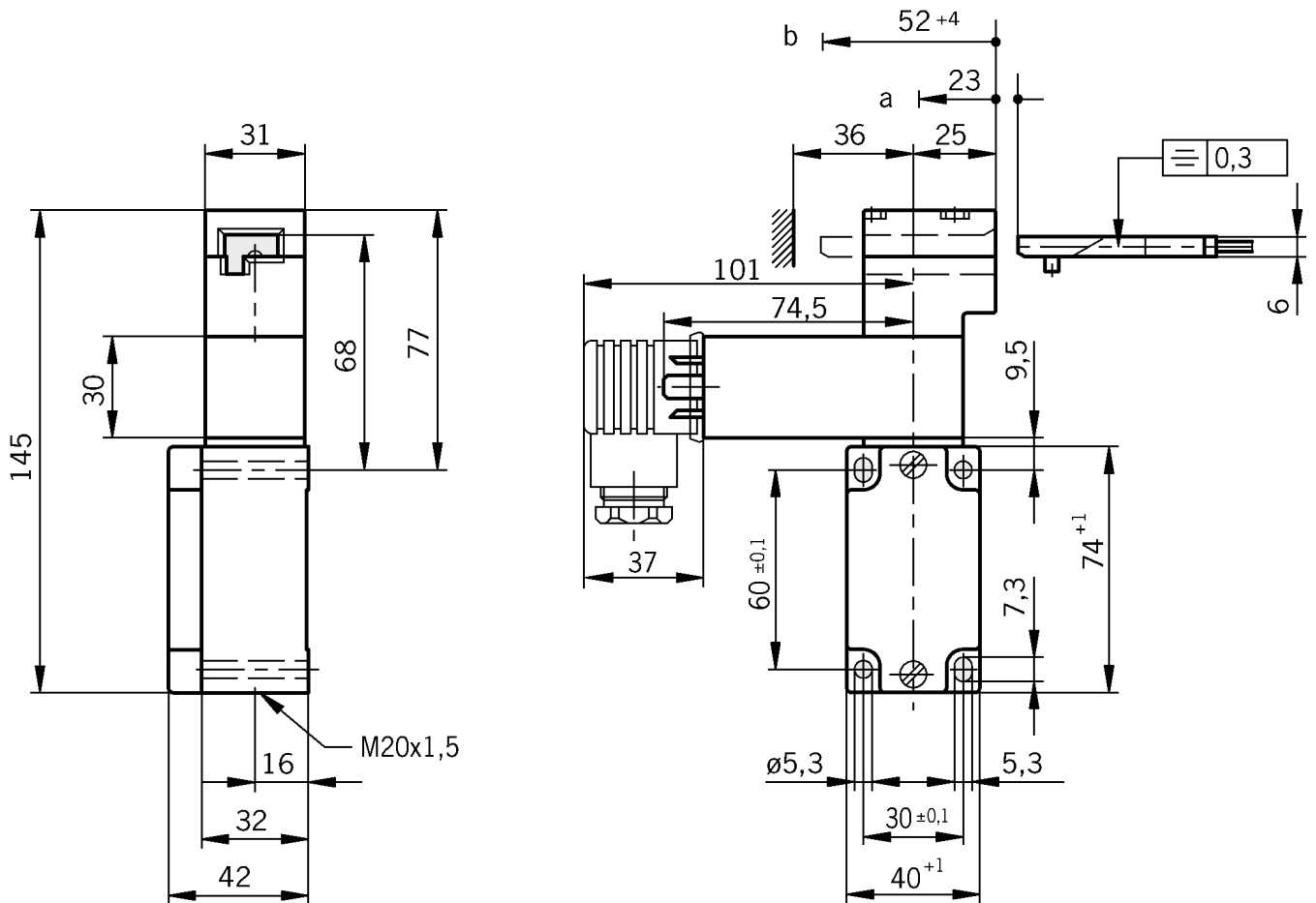
#### Switching element

2131H Slow-action switching contact 3 NC  $\rightarrow$  + 1 NO

#### Functional drawings



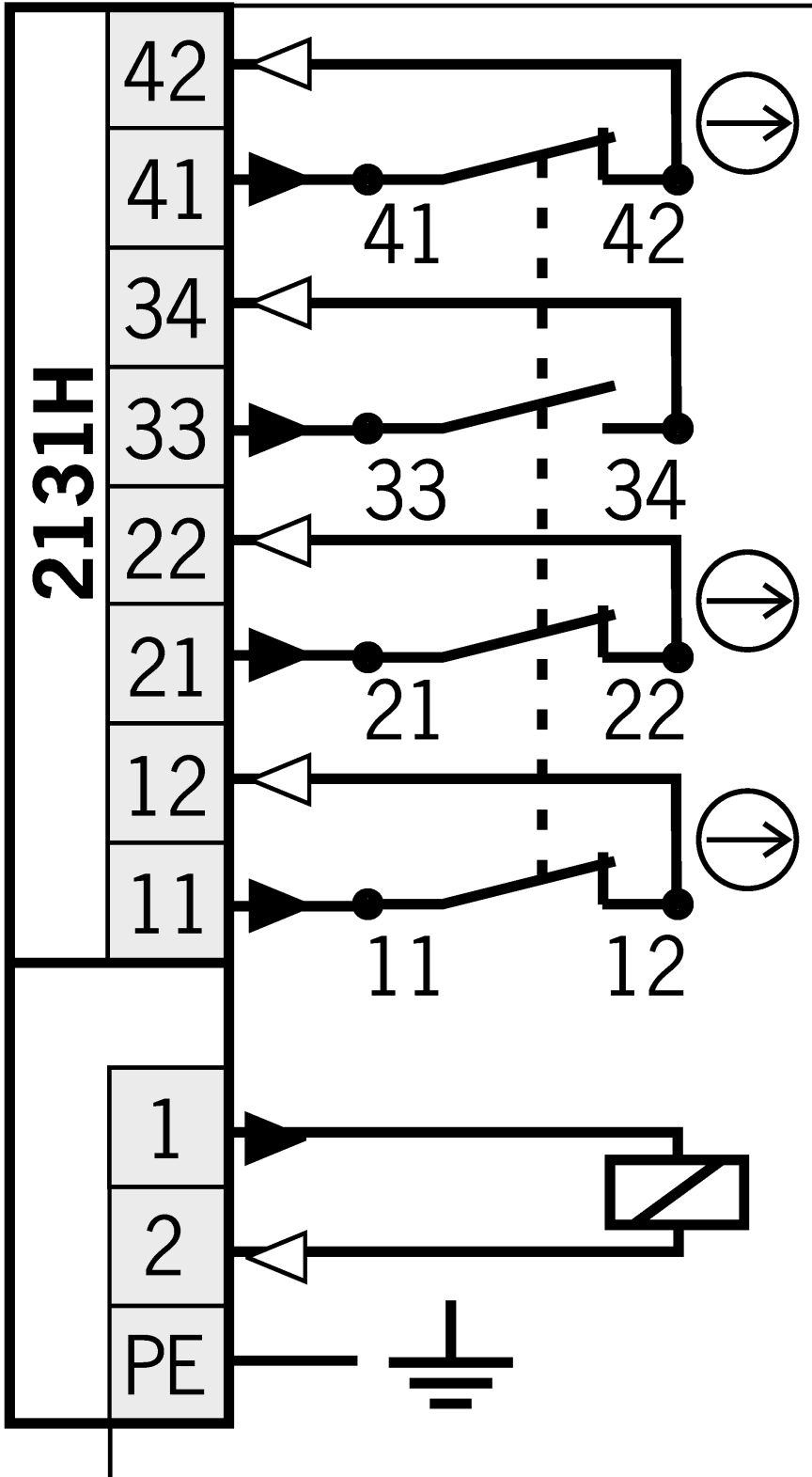
## Dimensional drawings



a Travel without operation: actuator is in the guide slot, but function is not triggered.

b Switching operation completed: actuator must be inserted to this point to ensure safe switching. The actuator must be withdrawn at least to point a for switching off.

Connection examples



## Technical data

### Approvals



### Electrical connection values

Connection cross section	0.34 ... 1.5 mm <sup>2</sup>
Rated insulation voltage U <sub>i</sub>	AC/DC 250 V
Rated impulse withstand voltage U <sub>imp</sub>	2.5 kV
Utilization category	DC-13 4 A 24 V AC-15 4 A 230 V
Short circuit protection according to IEC 60269-1	4A gG
Solenoid operating voltage	AC 110 V -15% ... 10%
Switching voltage	min. at 10 mA 12 V
Switching current	min. at 24 V 1 mA
thermal rated current I <sub>th</sub>	4 A

### Mechanical values and environment

Approach speed	max. 20 m/min
Approach direction	A
Connection type	1 x M20 x 1.5
Number of door position NO contacts	1
Number of door position positively driven contacts	3
Extraction force	40 N

Actuation frequency	max. 1200 1/h
Actuating force	45 N
Installation orientation	any
Insertion depth	52 mm
Solenoid alignment	3
Mechanical life	2 x 10 <sup>6</sup>
Retention force	35 N
Switching principle	Slow-action switching contact
Degree of protection	IP65
Ambient temperature	-25 ... +80 °C
Material	
	Contact Silver alloy, gold flashed
	Housing Anodized die-cast alloy
Locking force F <sub>max</sub>	2000 N
Locking force F <sub>Zh</sub>	1500 N
Guard locking principle	Open-circuit current principle

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

	B10 <sub>D</sub>	Mission time
Monitoring of the guard position	4.5x10 <sup>6</sup>	20 y
	Important! Values valid at DC-13 100 mA/24V	

### In combination with actuator ACTUATOR-Z-G

Overtravel	4 mm
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### In combination with actuator ACTUATOR-Z-GN

Overtravel	16 mm
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## Downloads

All documentation for this material can be found on our website:

<https://www.euchner.de/en-us/a/088036/?#downloads-tab>

**Ordering data**

Ordernumber	088036
Item designation	NZ1VZ-2131E3VSE07-M
Gross weight	0,812kg
Customs tariff number	85365019000
ECLASS	27-27-26-03 Safety switch with guard control

## Accessories

### Actuator

#### Actuator for safety switches NZ.VZ, NZ.VZ.VS and TZ



**016849**

BETAETIGER-Z-G

- ▶ Two stainless-steel safety screws per actuator



**074411**

BETAETIGER-Z-G/V25

- ▶ Two stainless-steel safety screws per actuator
- ▶ Packaging unit 25 pieces



**097436**

BETAETIGER-Z-GME

- ▶ Made of solid stainless steel
- ▶ Two stainless-steel safety screws per actuator



**072251**

BETAETIGER-Z-GN

- ▶ Two stainless-steel safety screws per actuator

#### Hinged actuator, bottom, for safety switches NZ.VZ, NZ.VZ.VS and TZ



**074414**

RADIUSBETAETIGER-Z-U/V25

- ▶ Two stainless-steel safety screws per actuator
- ▶ Packaging unit 25 pieces



**048850**

RADIUSBETAETIGER-Z-U

- ▶ Two stainless-steel safety screws per actuator

#### Hinged actuator, left, for safety switches NZ.VZ, NZ.VZ.VS and TZ



**024298**

RADIUSBETAETIGER-Z-L

- ▶ Two stainless-steel safety screws per actuator



**074413**

RADIUSBETAETIGER-Z-L/V25

- ▶ Two stainless-steel safety screws per actuator
- ▶ Packaging unit 25 pieces



**100407**

RADIUSBETAETIGER-Z-L-C2194

- ▶ Two stainless-steel safety screws per actuator
- ▶ Smaller door radii

#### Hinged actuator, right, for safety switches NZ.VZ, NZ.VZ.VS and TZ



**024299**

RADIUSBETAETIGER-Z-R

- ▶ Two stainless-steel safety screws per actuator



**074412**

RADIUSBETAETIGER-Z-R/V25

- ▶ Two stainless-steel safety screws per actuator
- ▶ Packaging unit 25 pieces





**100406**  
RADIUSBETAETIGER-Z-R-C2194

- ▶ Two stainless-steel safety screws per actuator
- ▶ Smaller door radii

## Hinged actuator, top, for safety switches NZ.VZ, NZ.VZ.VS and TZ



**057950**  
RADIUSBETAETIGER-Z-O

- ▶ Two stainless-steel safety screws per actuator



**074415**  
RADIUSBETAETIGER-Z-O/N25

- ▶ Two stainless-steel safety screws per actuator
- ▶ Packaging unit 25 pieces

## Bolt

### Bolt NZ-A for safety switches NZ.VZ and NZ.VZ.VS



**057734**  
RIEGEL NZ-A

- ▶ Steel bolt
- ▶ For doors hinged on the right
- ▶ Can be locked in open position with padlocks
- ▶ Actuator and switch bracket included
- ▶ Bolt is not allowed to be used in conjunction with an escape release.

### Bolt NZ-A... for safety switches NZ.VZ and NZ.VZ.VS



**083890**  
RIEGEL NZ-AB

- ▶ Steel bolt
- ▶ For doors hinged on the right
- ▶ Ball detent mechanism in closed position
- ▶ Can be locked in open position with padlocks
- ▶ Actuator and switch bracket included



**078455**  
RIEGEL NZ-AR2

- ▶ Steel bolt
- ▶ For doors hinged on the right
- ▶ Detent knob in open position
- ▶ Detent knob mechanism in closed position
- ▶ Can be locked in open position with padlocks
- ▶ Actuator and switch bracket included

### Bolt NZ-C for safety switches NZ.VZ and NZ.VZ.VS



**057735**  
RIEGEL NZ-C

- ▶ Steel bolt
- ▶ For doors hinged on the left
- ▶ Can be locked in open position with padlocks
- ▶ Actuator and switch bracket included

### Bolt NZ-C... for safety switches NZ.VZ and NZ.VZ.VS



**083892**  
RIEGEL NZ-CB

- ▶ Steel bolt
- ▶ For doors hinged on the left
- ▶ Ball detent mechanism in closed position
- ▶ Can be locked in open position with padlocks
- ▶ Actuator and switch bracket included



**078456**

RIEGEL NZ-CR2

- ▶ Steel bolt
- ▶ For doors hinged on the left
- ▶ Detent knob in open position
- ▶ Detent knob mechanism in closed position
- ▶ Can be locked in open position with padlocks
- ▶ Actuator and switch bracket included

## Bolts NZ/TZ-S1 and NZ/TZ-S2 for safety switches NZ.VZ, NZ.VZ.VS and TZ



**028357**

RIEGEL NZ/TZ-S1

- ▶ Aluminum bolt
- ▶ For doors hinged on the left or right. Cone grip bottom.
- ▶ Spring catch in open position
- ▶ Can be locked in open position with padlocks
- ▶ Actuator included



**028359**

RIEGEL NZ/TZ-S2

- ▶ Aluminum bolt
- ▶ For doors hinged on the left or right. Cone grip top.
- ▶ Spring catch in open position
- ▶ Can be locked in open position with padlocks
- ▶ Actuator included

## Bolts NZ/TZ-S1/AF and NZ/TZ-S1/CF with escape release for safety switches NZ.VZ, NZ.VZ.VS and TZ with escape release



**079785**

RIEGEL NZ/TZ-S1/CF

- ▶ Aluminum bolt
- ▶ For doors hinged on the left
- ▶ Escape release
- ▶ Spring catch in open position
- ▶ Can be locked in open position with padlocks
- ▶ Actuator included



**079786**

RIEGEL NZ/TZ-S1/AF

- ▶ Aluminum bolt
- ▶ For doors hinged on the right
- ▶ Escape release
- ▶ Spring catch in open position
- ▶ Can be locked in open position with padlocks
- ▶ Actuator included

## Connection accessories

### Cable glands M20x1.5, cable Ø 6.5–9.5 mm



**077683**

EKVM20/06

### Cable glands M20x1.5, cable Ø 9–13 mm



**077684**

EKVM20/09

## Solenoid plug for safety switch NZ.VZ.VS

**028338**

STECKVERBINDER M. GLEICHR. F. MAGNETV.

- ▶ With rectifier for the connection of AC 110 V – AC 230 V.

## Function expansion

### LED function display NZ



**029221**  
NGLE060GR



**029220**  
NGLE060RT

### Lockout bar NZ.VZ/TZ, 3 holes



**046730**  
SPERREINSATZ-Z-046730

- ▶ Prevents unintentional closing of the door
- ▶ Can be secured with padlocks



**091305**  
SPERREINSATZ MIT KETTE

- ▶ Prevents unintentional closing of the door
- ▶ Can be secured with padlocks

### Lockout bar NZ.VZ/TZ, 5 holes

**086538**  
SPERREINSATZ-Z-086538

- ▶ Prevents unintentional closing of the door
- ▶ Can be secured with padlocks

### Protective plate NZ.VZ/TZ

**059136**  
SCHUTZBLECH NZ/TZ

## Mounting accessories

### Mounting plates EMP-B1 for actuators for safety switches CTP, CTA, TP...A, STA, STP, TX and TZ



**093457**  
EMP-B1

### Mounting plates EMP-B2 for actuators for safety switches CTP, CTA, TP...A, STA, STP, TX and TZ



**093458**  
EMP-B2

### Mounting plates EMP-SC for safety switches NM, NP...AS and NZ



**085753**  
EMP-SC

- ▶ For vertical and horizontal mounting of safety switches NM, NP...AS and NZ

## Spare parts

### Replacement head NZ.VZ

**076250**

BETAETIGUNGSKOPF NZ.VZ – KPL. – C1795