

NZ1VZ-538E3VSM07L110-M (ORDER NO. 090340)

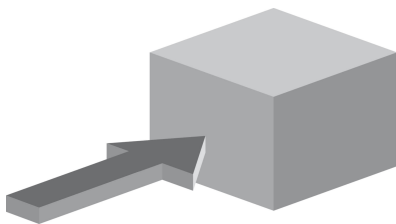
Safety switch NZ.VZ.VSM (guard locking, closed-circuit current principle)

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



Description

Approach direction



Figure

Horizontal

Can be adjusted in 90° steps

LED function display

A function display is available for the following voltage range:

- ▶ AC 110 V±15% red

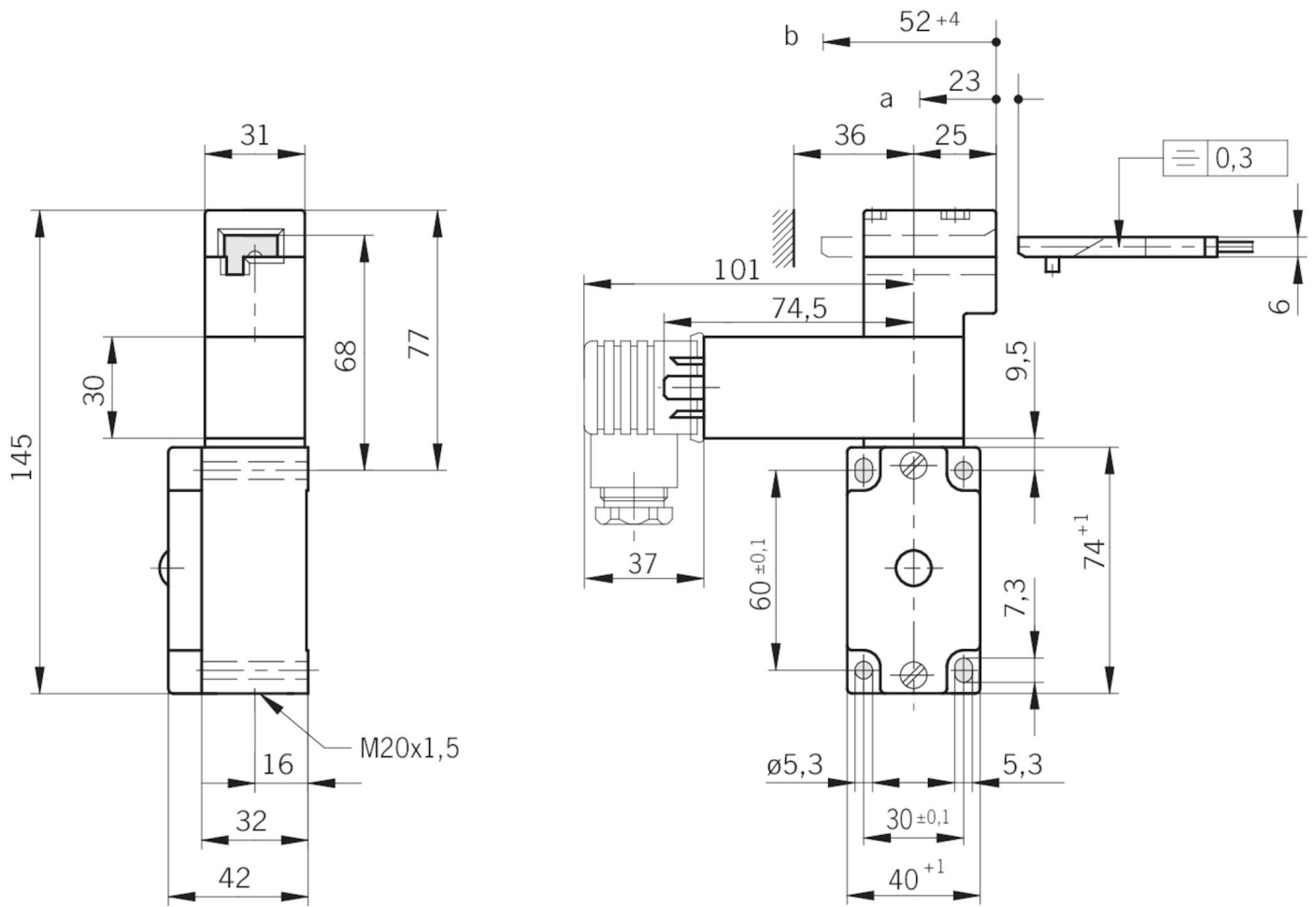
Guard locking type

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

Switching element

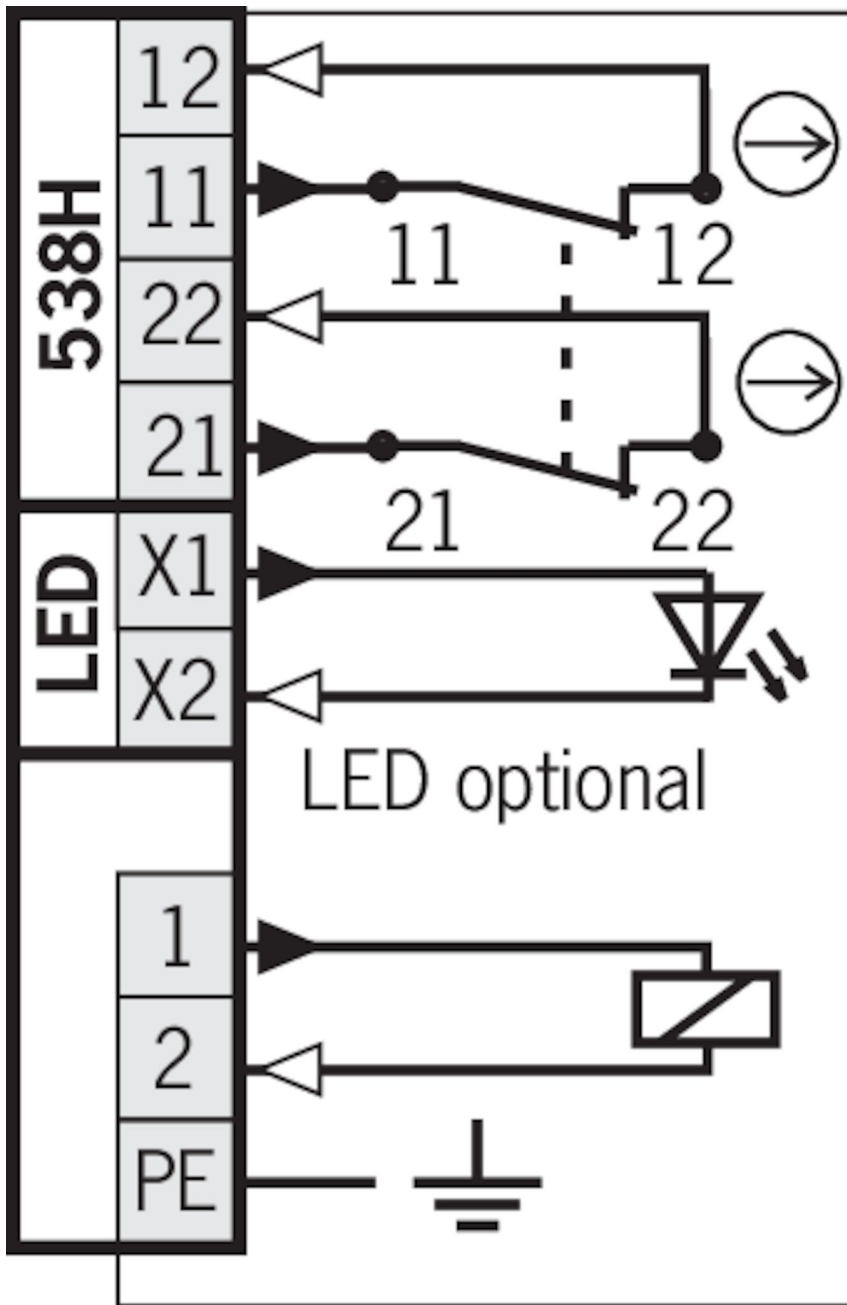
538H Slow-action switching contact 2 NC (→)

Dimension drawing

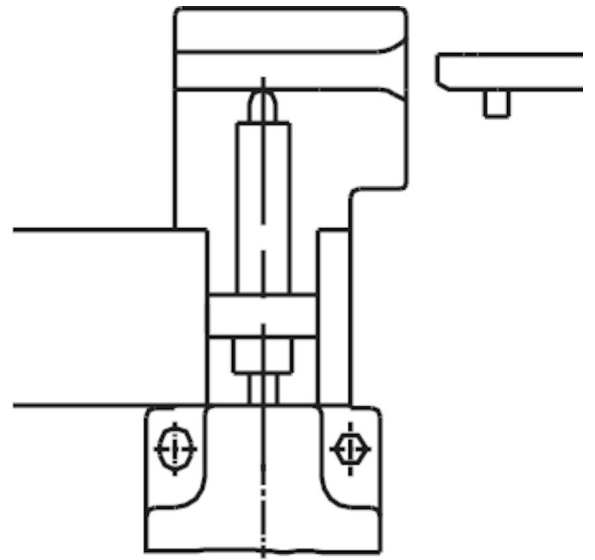
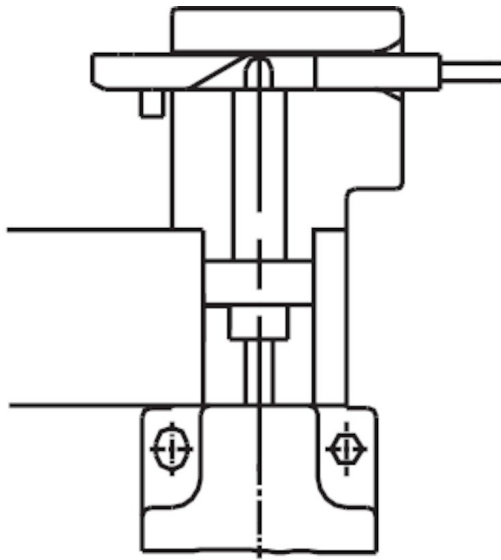


- a Travel without operation: actuator is in the guide slot, but function is not triggered.
- b Switching operation completed: actuator must be inserted to this point to ensure reliable switching. The actuator must be withdrawn at least to point a for switching off.

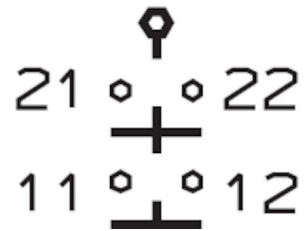
538H



Switching functions



538



Technical data

Approvals



Mechanical values and environment

Housing material	Housing	Anodized die-cast alloy
Weight	Net	0,7 kg
Ambient temperature		-25 ... 80 °C
Degree of protection		IP65
Mechanical life		2 x 10 ⁶
Contact material		Silver alloy, gold flashed
Switching principle		Slow-action switching contact
Solenoid alignment		3
Installation orientation		Any
Number of door position positively driven contacts		2
Connection	1 x	M20 x 1.5
Approach speed		max.20 m/min
Actuation frequency		max.1200 1/h
Guard locking principle		Closed-circuit current principle
Locking force F _{max}		2000 N
Locking force F _{Zh}		1500 N
Retention force		35 N
Extraction force		40 N
Actuating force		45 N
Insertion depth		52 mm
Electrical connection ratings		
Thermal rated current I _{th}		4 A
Utilization category according to EN 60947-5-1		
	AC-15	4A 230V
	DC-13	4A 24V
Solenoid operating voltage		
	AC	110 V -15 ... 10
Short circuit protection according to IEC 60269-1		4A gG
Rated insulation voltage U _i		
	AC/DC	250 V
Rated impulse withstand voltage U _{imp}		2,5 kV
Switching voltage		
	Min. at 10mA	12 V
Switching current		
	Min. at 24V	1 mA
Connection cross-section		0,34 ... 0,75 mm ²
Display module		
	AC	110 V Red

Reliability values according to EN ISO 13849-1

Control of the guard locking

Category	Depending on external control of guard locking
Performance Level	Depending on external control of guard locking
PFH _D	Depending on external control of guard locking
Monitoring of the position of the safety guard	
B10 _D	4,5 x 10 ⁶

In combination with Actuator BETAETIGER-Z-G

Mechanical values and environment

Overtravel	4 mm
------------	------

In combination with Actuator BETAETIGER-Z-GN

Mechanical values and environment

Overtravel	16 mm
------------	-------

Accessories

Actuator

Actuators for safety switches NZ.VZ, NZ.VZ.VS and TZ



016849
BETAETIGER-Z-G

- ▶ Two stainless safety screws per actuator



074411
BETAETIGER-Z-G/V25

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



097436
BETAETIGER-Z-GME

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



072251
BETAETIGER-Z-GN

- ▶ Two stainless safety screws per actuator

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



048850
RADIUSBETAETIGER-Z-U

- ▶ Two stainless safety screws per actuator



074414
RADIUSBETAETIGER-Z-U/V25

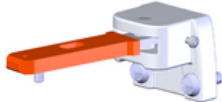
- ▶ Two stainless safety screws per actuator
- ▶ Packaging unit 25 pieces

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



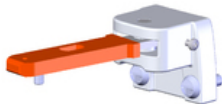
100407
RADIUSBETAETIGER-Z-L-C2194

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



024298
RADIUSBETAETIGER-Z-L

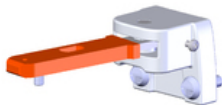
- ▶ Two stainless safety screws per actuator



074413
RADIUSBETAETIGER-Z-L/V25

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

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



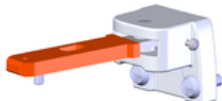
024299
RADIUSBETAETIGER-Z-R

- ▶ Two stainless safety screws per actuator



100406
RADIUSBETAETIGER-Z-R-C2194

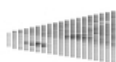
- ▶ Two stainless safety screws per actuator
- ▶ Smaller door radii



074412
RADIUSBETAETIGER-Z-R/V25

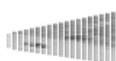
- ▶ Two stainless safety screws per actuator
- ▶ Packaging unit 25 pieces

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



057950
RADIUSBETAETIGER-Z-O

- ▶ Two stainless safety screws per actuator



074415
RADIUSBETAETIGER-Z-O/V25

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

Bolt

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-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-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

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

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



028359
RIEGEL NZ/TZ-S2

- ▶ Actuator included
- ▶ 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 N7/T7-S1/AF and NZ/TZ-S1/CF with escape release for safety switches NZ.VZ, NZ.VZ.VS and TZ with escape release



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



079785
RIEGEL NZ/TZ-S1/CF

- ▶ Actuator included
- ▶ 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

Connection material

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.FMAGNETV.

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

Function expansion

LED function display NZ



029220
NGLE060RT



029221
NGLE060GR

Lockout mechanism 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 mechanism 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, TP...A, STA, STP, TX and TZ



093457
EMP-B1

Mounting plates EMP-B2 for actuators for safety switches CTP, 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 NZVZ

Contacts

🏠 EUCHNER GmbH + Co. KG
Kohlhammerstraße 16
70771 Leinfelden-Echterdingen

☎ +49 711 7597-0

📠 +49 711 753316

✉ info(at)euchner.de