
TZ1LE024M (ORDER NO. 082050)

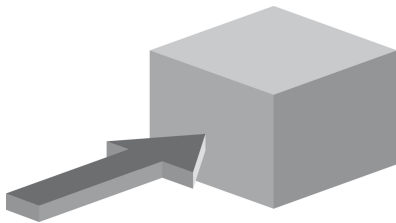
Safety switch TZ

- ▶ Auxiliary release on the front
- ▶ Two LED indicators, red and green
- ▶ Actuating head fitted left



DESCRIPTION

Approach direction



Figure

Horizontal

Can be adjusted in 90° steps

Solenoid operating voltage and LED function display

- ▶ 24 V AC/DC -15%, +10%

Guard locking type

TZ1 Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the solenoid.

Switching element

SK For monitoring the door/actuator position

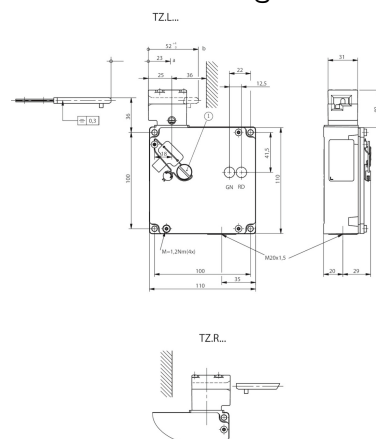
ÜK For monitoring the guard locking (built-in solenoid)

528H Slow-action switching contact 1 NC(→) + 1 NO

Auxiliary release

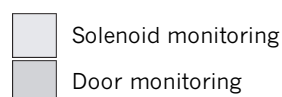
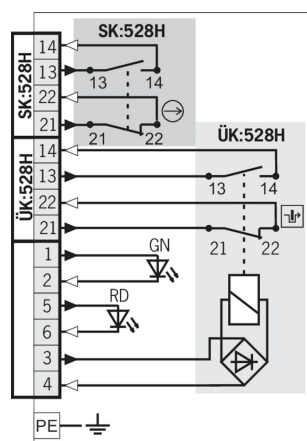
Is used for releasing the guard locking with the aid of a tool. Sealing can be fitted to protect against tampering. Lead seal kit and tool included (already pre-assembled on versions with plug connectors).

Dimension drawing

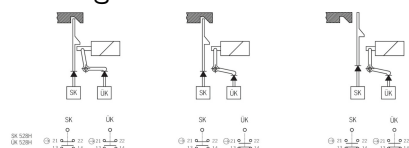


1 Auxiliary release

SK: 528H / ÜK: 528H



Switching functions



TECHNICAL DATA

Approvals



Mechanical values and environment

Housing material	Anodized die-cast alloy
Weight	
	Net 1,2 kg
Ambient temperature	-25 ... 80 °C
Degree of protection	IP67
Mechanical life	1 x 10 ⁶
Contact material	Silver alloy, gold flashed
Switching principle	Slow-action switching contact
Installation orientation	Any
Number of door position positively driven contacts	1
Number of door position NO contacts	1
Number of guard lock monitoring positively driven contacts	1
Number of guard lock monitoring NO contacts	1
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	10 N
Extraction force	30 N
Actuating force	35 N
Insertion depth	min.52 mm
Cover lid	Black

Electrical connection ratings

Thermal rated current I_{th}	4 A (>70°C => 2A)
Utilization category according to EN 60947-5-1	
	AC-15 4A 230V (>70°C => 2A)
	DC-13 4A 24V (>70°C => 2A)
Solenoid operating voltage	
	AC/DC 24 V -15% ... +10%
Short circuit protection according to IEC 60269-1	
	(Fuse) 4A gG (> 70°C => 2A gG)
Rated insulation voltage U_i	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
Power consumption	10 W
Solenoid duty cycle	100 %
Connection cross-section	0,34 ... 1,5 mm ²
LED indicator	Operating voltage corresponds to the solenoid voltage (2 LEDs; green, 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 guard locking and the safety guard position
B10 _D	3 x 10 ⁶

In combination with Actuator BETAETIGER-Z-GN

Mechanical values and environment

Horizontal overtravel (A B C D E)	16 mm
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In combination with Actuator BETAETIGER-Z-G

Mechanical values and environment

Overtravel	4 mm
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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

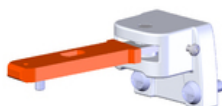
- ▶ Two stainless safety screws per actuator
- ▶ Packaging unit 25 pieces

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



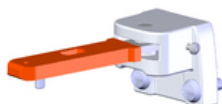
100407
RADIUSBETAETIGER-Z-L-C2194

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



024298
RADIUSBETAETIGER-Z-L

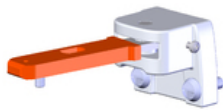
- ▶ Two stainless safety screws per actuator



074413
RADIUSBETAETIGER-Z-L/V25

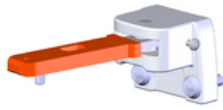
- ▶ Two stainless safety screws per actuator
- ▶ Packaging unit 25 pieces

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



024299
RADIUSBETAETIGER-Z-R

- ▶ Two stainless safety screws per actuator



074412
RADIUSBETAETIGER-Z-R/V25

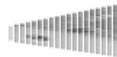
- ▶ Two stainless safety screws per actuator
- ▶ Packaging unit 25 pieces



100406
RADIUSBETAETIGER-Z-R-C2194

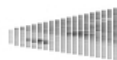
- ▶ Two stainless safety screws per actuator
- ▶ Smaller door radii

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



057950
RADIUSBETAETIGER-Z-O

- ▶ Two stainless safety screws per actuator



074415
RADIUSBETAETIGER-Z-O/V25

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

Bolt

Bolt BTC-TZ00... without escape release for safety switch TZ



106280
BTC-TZ00-C-TH-00-X

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



106278
BTC-TZ00-A-TH-00-X

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

Bolt TZ-C... for safety switches TZ



057737
RIEGEL TZ-C

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



079799
RIEGEL TZ-C-NIRO

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



096058
RIEGEL TZ-C-NIRO-C2101

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



117194
RIEGEL TZ-C-NIRO-C2392

- ▶ Stainless 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
- ▶ 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

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

Function expansion

Adapter NZ/TZ 45/30



079033
ADAPTER NZ/TZ 45/30

- ▶ The adapter NZ/TZ 45/30 is used to compensate for different profiles, doors/frame 45/30

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-SA for safety switches TZ



094401
EMP-SA

- ▶ For vertical and horizontal mounting of safety switch TZ

Safety screws M4 x 14

074063
M4X14/V100

- ▶ Safety screws M4 x 14
- ▶ Packaging unit 100 pieces

Safety screws M5 x 10

073455
M5X10-NIRO/V100 NZ/TZ

- ▶ Safety screws M5 x 10
- ▶ Packaging unit 100 pieces

Safety screws M5 x 16

073456
M5X16/V100

- ▶ Safety screws M5 x 16
- ▶ Packaging unit 100 pieces

Safety screws for actuators, M5 x 25

073457
M5X25/V100

- ▶ Safety screws M5 x 25
- ▶ Packaging unit 100 pieces

Spare parts

Lead seal kit

048257
PLOMBENSATZ TZ

087256
PLOMBENSATZ C1937

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