

ITEM 089471 TZ1RE024M-089471

Description	Technical data	Accessories	Downloads
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Features

- › Auxiliary release on the front
- › Protective plate for switch head
- › Two LED indicators, red and green
- › Actuating head fitted right

Approach direction



- › Figure
Horizontal
Can be adjusted in 90° steps

Protective plate for switch head

Makes it more difficult to tamper with the switch.

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).

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 position	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	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

Rated thermal current I_{th}	4 A [1]
Utilization category according to EN 60947-5-1	AC-15 4A 230V [2] DC-13 4A 24V [3]
Solenoid operating voltage	AC/DC 24 V -15% ... +10%
Short circuit protection according to IEC 60269-1	(Fuse) 4A gG [4]
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 [5]

Miscellaneous

C number	089470 With protective plate
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Reliability values acc. 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-G

Mechanical values and environment

Overtravel	4 mm
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in combination with Actuator BETAETIGER-Z-GN

Mechanical values and environment

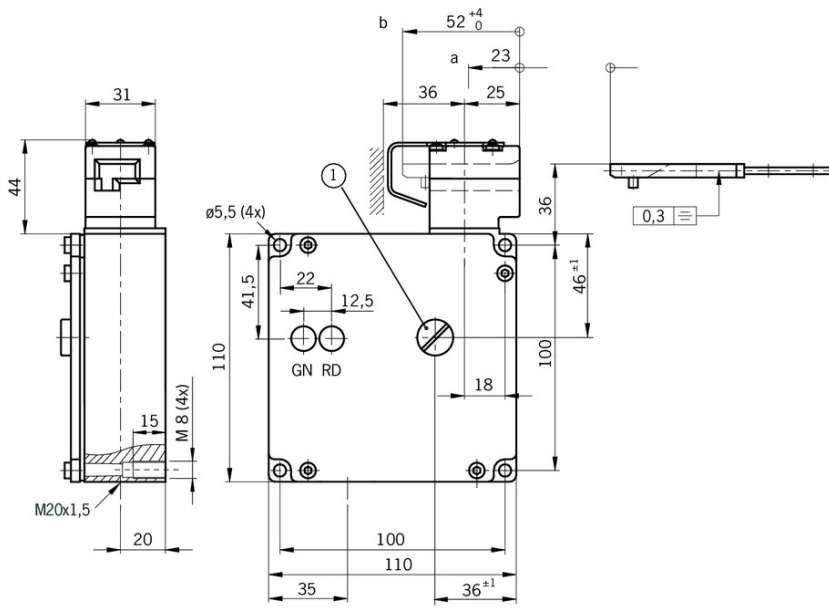
Overtravel	16 mm
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[1, 2, 3] >70°C => 2A

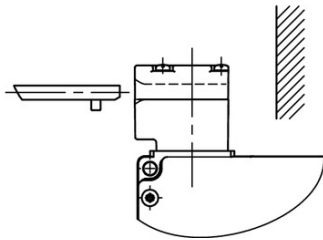
[4] > 70°C => 2A gG

[5] 2 LEDs; green, red

Dimension drawing

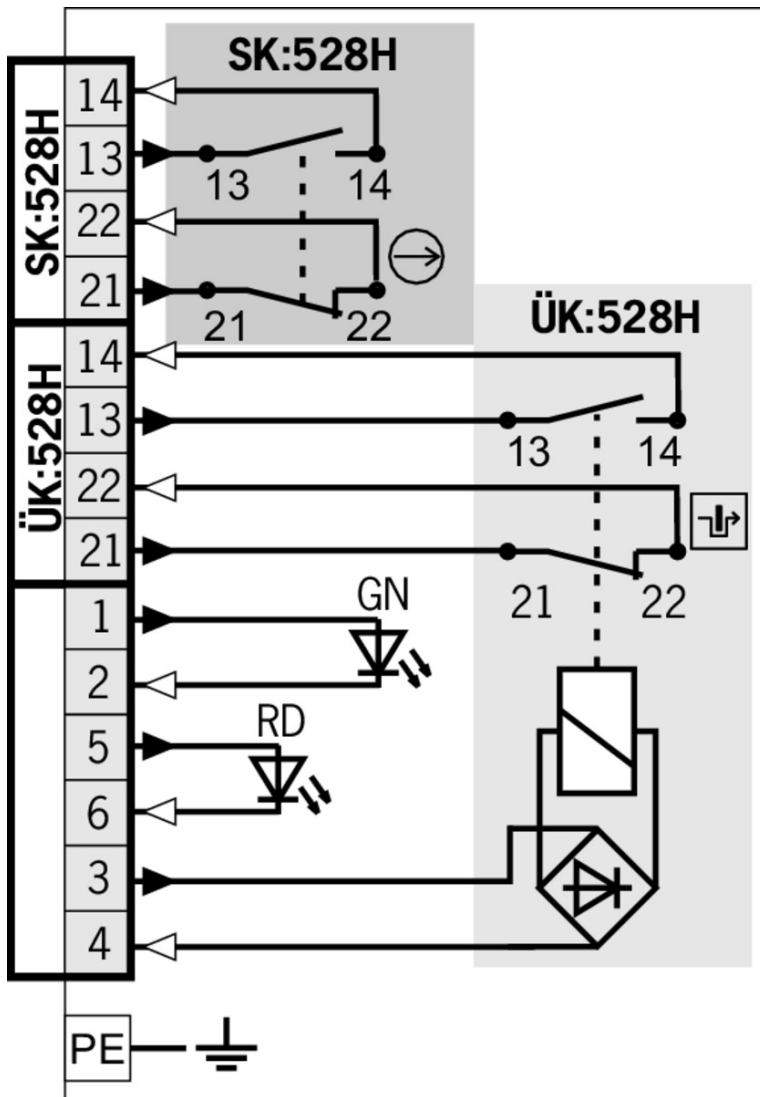


TZ.L...



Legende

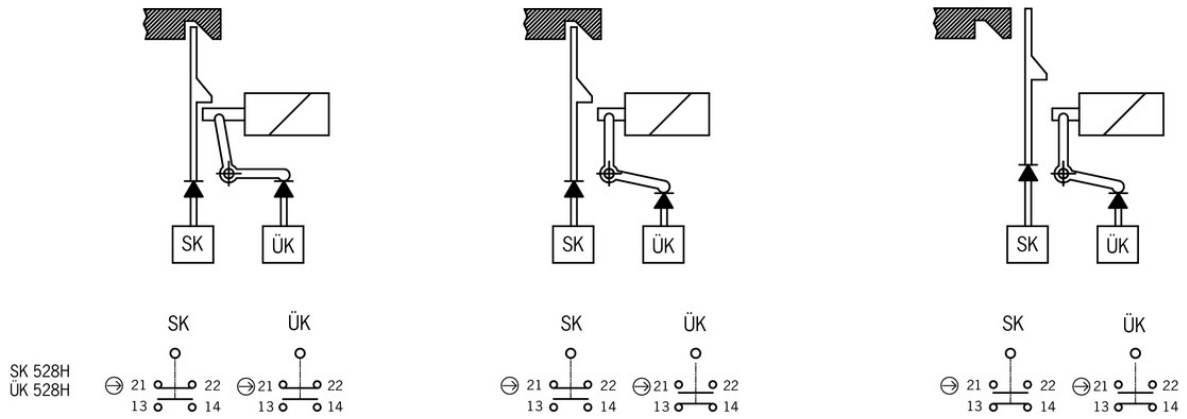
1 Auxiliary release



Legende

- Solenoid monitoring
- Door monitoring

Switching functions



Mounting accessories

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



093458 EMP-B2

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



093457 EMP-B1

- ✓ Mounting plates EMP-SA for safety switches TZ



094401 EMP-SA

- ✓ Features

- › For vertical and horizontal mounting of safety switch TZ

- ✓ Safety screws for actuators, M5 x 10

073455 M5X10-NIRO/V100 NZ/TZ

- ✓ Features

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

- ✓ Safety screws for actuators, M5 x 16

073456 M5X16/V100

- ✓ Features

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

- ✓ Safety screws M5 x 25

073457 M5X25/V100

✓ Features

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

Bolt

✓ Bolt TZ-A... for safety switches TZ



079798 RIEGEL TZ-A-NIRO

✓ Features

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



096057 RIEGEL TZ-A-NIRO-C2101

✓ Features

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



057736 RIEGEL TZ-A

✓ Features

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



117193 RIEGEL TZ-A-NIRO-C2392

✓ Features

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

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



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

✓ Features

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

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



028359 RIEGEL NZ/TZ-S2

✓ Features

- › 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



028357 RIEGEL NZ/TZ-S1

✓ Features

- › 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

Function expansion

✓ Protective plate NZ.VZ/TZ

059136 SCHUTZBLECH NZ/TZ

✓ Adapter NZ/TZ 45/30



079033 ADAPTER NZ/TZ 45/30

✓ Features

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

Spare parts

✓ Lead seal kit

048257 PLOMBENSATZ TZ

Actuator

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



057950 RADIUSBETAETIGER-Z-O

✓ Features

- › Two stainless safety screws per actuator



074415 RADIUSBETAETIGER-Z-O/V25

✓ Features

- › 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

▼ Features

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



074413 RADIUSBETAETIGER-Z-L/V25

▼ Features

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



024298 RADIUSBETAETIGER-Z-L

▼ Features

- › Two stainless safety screws per actuator

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



074414 RADIUSBETAETIGER-Z-U/V25

▼ Features

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



048850 RADIUSBETAETIGER-Z-U

▼ Features

- › Two stainless safety screws per actuator

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



100406 RADIUSBETAETIGER-Z-R-C2194

▼ Features

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



074412 RADIUSBETAETIGER-Z-R/V25

▼ Features

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



024299 RADIUSBETAETIGER-Z-R

▼ Features

- › Two stainless safety screws per actuator

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



072251 BETAETIGER-Z-GN

▼ Features

- › Two stainless safety screws per actuator



016849 BETAETIGER-Z-G

Features

- › Two stainless safety screws per actuator



074411 BETAETIGER-Z-G/V25

Features

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



097436 BETAETIGER-Z-GME

Features

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

Connection material

▼ Cable glands M20x1.5



077684 EKVM20/09

Instructions

▼ Betriebsanleitung Sicherheitsschalter TZ...

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter TZ... Operating Instructions TZ... Safety Switch Manual de instrucciones del interruptor de seguridad TZ... Mode d'emploi Interrupteur de sécurité TZ... Istruzioni di impiego dei finecorsa di sicurezza TZ...	2088062	09-05/18	 	6.9 MB
Instrukcja obsługi wyłącznika bezpieczeństwa TZ...	2088062	09-05/18		1.8 MB
Manual de instruções da chave de segurança TZ...	2088062	09-05/18		1.5 MB
Руководство по эксплуатации предохранительных выключателей TZ...	2088062	09-05/18		1.9 MB
Návod na obsluhu – bezpečnostný spínač TZ...	2088062	09-05/18		1.8 MB
使用说明书安全开关 TZ...	2088062	09-05/18		1.6 MB

Declaration of conformity

 EU prohlášení o shodě

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità EU declaration of conformity	2077153	25-02/17	    	 0.3 MB
EU prohlášení o shodě EU-overensstemmelseserklæring Δήλωση συμμόρφωσης της ΕΕ EU-vaatimustenmukaisuusvakuutus EU-típusbizonyítvány EU-conformiteitsverklaring Deklaracja zgodności UE Declaração de Conformidade UE Declarația de conformitate UE EÚ vyhlásenie o zhode	2077153	25-02/17	        	 0.5 MB

CAD data

CAD data for this item on TraceParts