

## ITEM 122828 TK1-528CB024SM8

Description	Technical data	Accessories	Downloads
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### Features

- › Mounting on plastic housing TP with actuating head and guard locking pin made of metal
- › High locking forces of 5000 N
- › Auxiliary release on the switch head
- › Actuating element for contact separation on the front
- › Plug connector M12

### Solenoid operating voltage

- › AC/DC 24 V +10%, -15%

### Guard locking type

**TK1** Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the guard locking solenoid.

### Switching element

**528** Slow-action switching contact 1 NC ⊕ + 1 NO

## Auxiliary release

Is used for releasing the guard locking with the aid of a tool.

## Contact separation

When actuated, positively driven NC contacts 21-22 are opened. Guard locking is not fully unlocked. The auxiliary release must be sealed to prevent tampering (e.g. with sealing lacquer).

## Approvals



## Mechanical values and environment

Housing material	Reinforced thermoplastic
Weight	
	Net 0,6 kg
Ambient temperature	-20 ... 55 °C
Degree of protection	IP67
Mechanical life	1 x 10 <sup>6</sup>
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 NO contacts	1
Connection	
	1 x Plug connector M12 [1]
Actuation frequency	1200 1/h
Guard locking principle	Closed-circuit current principle
Locking force F <sub>max</sub>	5000 N

## Electrical connection ratings

Rated thermal current I <sub>th</sub>	1 A
Utilization category according to EN 60947-5-1	
	AC-15 1A 24V
	DC-13 1A 24V
Solenoid operating voltage	
	AC/DC 24 V -15% ... +10%
Short circuit protection according to IEC 60269-1	

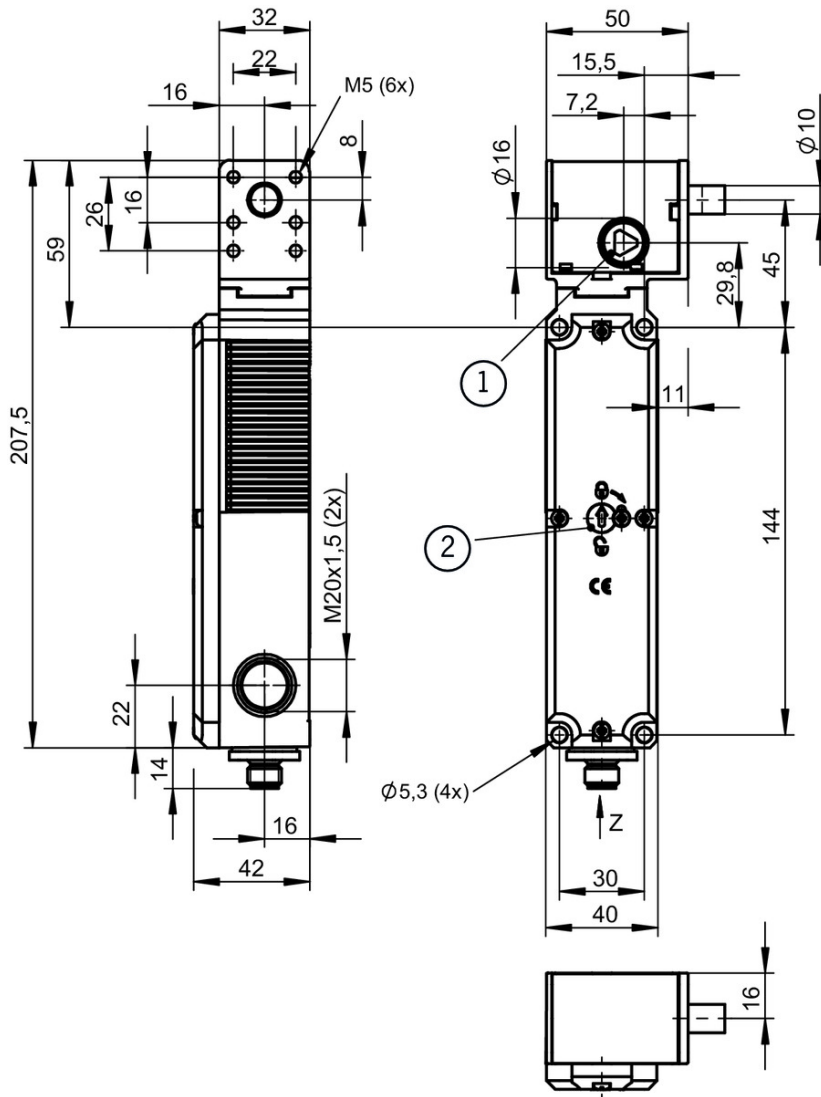
	(Fuse)	1A gG
Rated insulation voltage U <sub>i</sub>		30 V
Rated impulse withstand voltage U <sub>imp</sub>		1,5 kV
Switching voltage		
	Min. at 10mA	12 V
Switching current		
	Min. at 24V	1 mA
Power consumption		8 W
Solenoid duty cycle		100 %

### Reliability values acc. to EN ISO 13849-1

	<b>Monitoring of guard locking</b>
B10 <sub>D</sub>	2 x 10 <sup>6</sup>
	<b>Control of the guard locking</b>
Category	Depending on external control of guard locking
Performance Level	Depending on external control of guard locking
PFH <sub>D</sub>	Depending on external control of guard locking

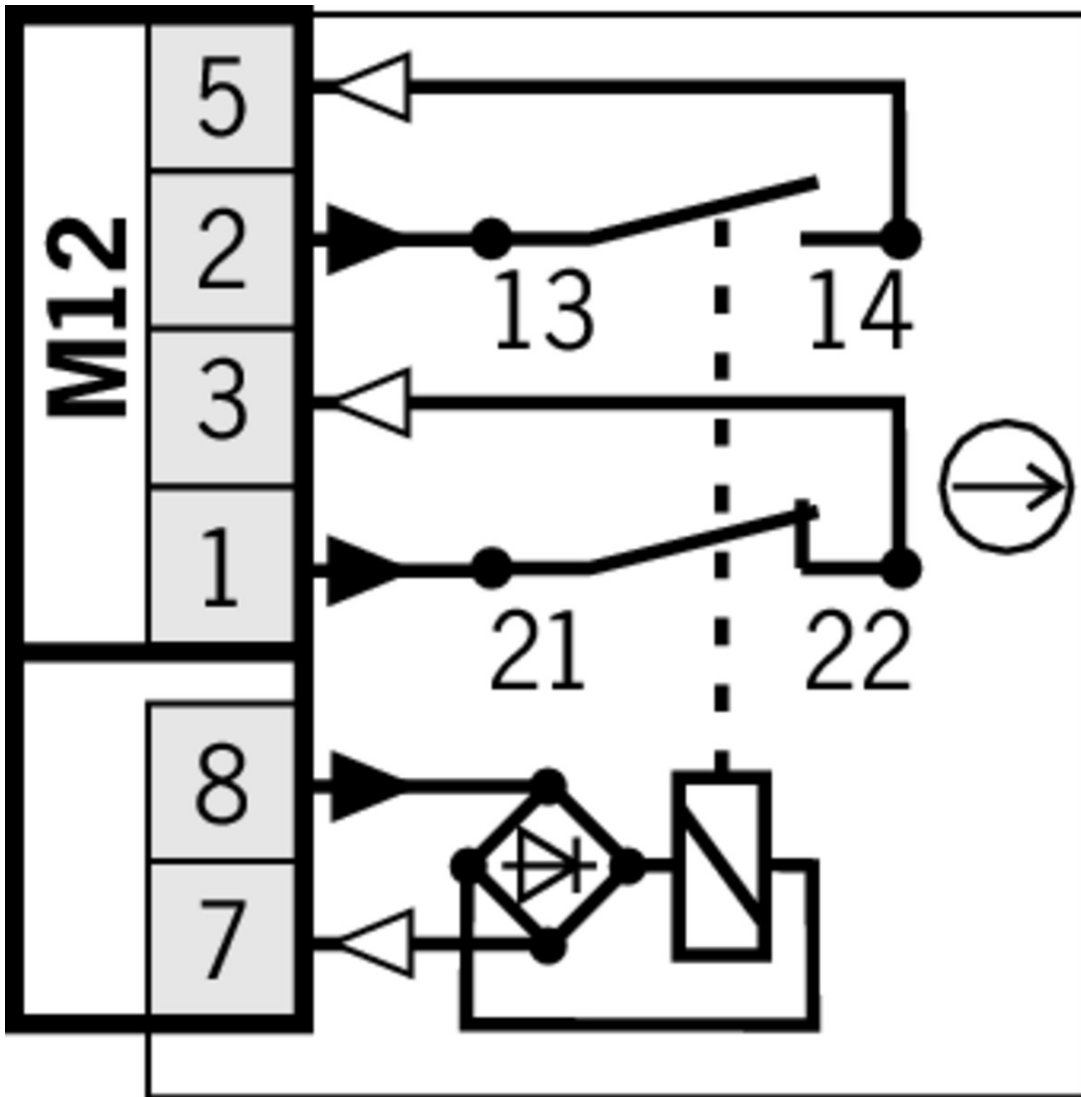
[1] 8-pin

## Dimension drawing

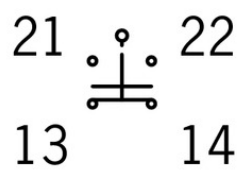
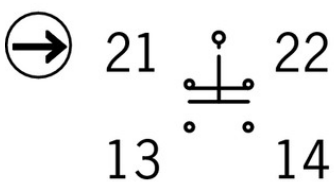
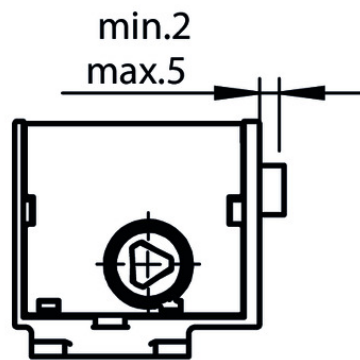
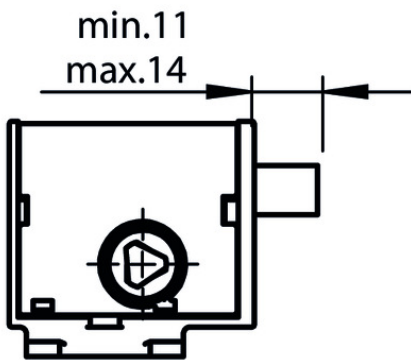


## Legende

- Plug not aligned
- 1 Auxiliary release on both sides
- 2 Contact separation



Switching functions



## Spare parts

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- ✓ Triangular key for safety switch TK



**103057** DREIKANTSCHLUESSEL

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## Connection material

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- ✓ Connection cable with plug connector M12, 8-pin, 5m



**100177** C-M12F08-08X025PV05,0-MA-100177

- ✓ Features

- › M12 female plug, 8-pin
  - › Straight plug connector
  - › PVC cable
  - › Cable length 5 m
  - › With flying lead
- 



**115112** C-M12F08-08X025PU05,0-MA-115112

- ✓ Features

- › M12 female plug, 8-pin
  - › Straight plug connector
  - › PUR cable
  - › Cable length 5 m
  - › With flying lead
- 

- ✓ Connection cable with plug connector M12, 8-pin, 10m



**100178** C-M12F08-08X025PV10,0-MA-100178

- ✓ Features

- › M12 female plug, 8-pin
  - › Straight plug connector
  - › PVC cable
  - › Cable length 10 m
  - › With flying lead
- 



**115113** C-M12F08-08X025PU10,0-MA-115113

- ✓ Features

- › M12 female plug, 8-pin
  - › Straight plug connector
  - › PUR cable
  - › Cable length 10 m
  - › With flying lead
- 

- ✓ Connection cable with plug connector M12, 8-pin, 20m



**100179** C-M12F08-08X025PV20,0-MA-100179

- ✓ Features

- › M12 female plug, 8-pin

- › Straight plug connector
- › PVC cable
- › Cable length 20 m
- › With flying lead



**115114** C-M12F08-08X025PU20,0-MA-115114

✓ Features

- › M12 female plug, 8-pin
- › Straight plug connector
- › PUR cable
- › Cable length 20 m
- › With flying lead

✓ Connection cable with plug connector M12, 8-pin, 30m



**115116** C-M12F08-08X025PV30,0-MA-115116

✓ Features

- › M12 female plug, 8-pin
- › Straight plug connector
- › PVC cable
- › Cable length 30 m
- › With flying lead



**115257** C-M12F08-08X025PU30,0-MA-115257

✓ Features

- › M12 female plug, 8-pin
- › Straight plug connector
- › PUR cable
- › Cable length 30 m
- › With flying lead

## Instructions

✓ Betriebsanleitung Sicherheitsschalter TK...

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter TK...	2094207	07-12/17		3.3 MB
Operating Instructions Safety Switch TK...				
Manual de instrucciones del interruptor de seguridad TK...				
Mode d'emploi Interrupteur de sécurité TK...				


## Catalogs

✓ Bezpečnostní spínače s plastovým pouzdrém Sicherheitsschalter mit Kunststoffgehäuse Safety Switches with Plastic Housing Interruptores de seguridad con carcasa plástica Interrupteurs de sécurité avec boîtier plastique 塑料壳体 的安全开关

Doc. no. Version Language Download

Sicherheitsschalter mit Kunststoffgehäuse	096955	11-03/18		 6.6 MB
Interrupteurs de sécurité avec boîtier plastique	100677	11-03/18		 6.6 MB
Interruptores de seguridad con carcasa plástica	104855	11-03/18		 6.6 MB
Bezpečnostní spínače s plastovým pouzdrém	121649	11-03/18		 6.6 MB
Safety Switches with Plastic Housing	096956	11-03/18		 6.6 MB
塑料壳体 的安全开关	116243	11-03/18		 6.2 MB

## Declaration of conformity

 EU prohlášení o shodě

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung	2077153	25-02/17		 0.3 MB
Declaración UE de conformidad				
Déclaration UE de conformité				
Dichiarazione di conformità				
EU declaration of conformity				
EU prohlášení o shodě	2077153	25-02/17		 0.5 MB
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				