

## ITEM 098993 STA3A-4141A024SEM4AS1

Description	Technical data	Accessories	Downloads
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### Features

- › Auxiliary release on the front

### Guard locking type

**STA3** Closed-circuit current principle, guard locking by spring force. Release by control of AS-i output 0.

### Control of the guard locking solenoid

The guard locking solenoid is controlled by the control system via AS-Interface bus bit D0. In addition the 24V connection can be switched safely.

### AS-Interface inputs

**D0, D1** Door monitoring contact SK  
**D2, D3** Solenoid monitoring contact ÜK  
Evaluation is performed via a safety monitor.

### AS-Interface outputs

- D1** Red LED
- D2** Green LED

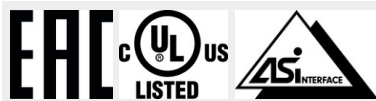
### LED function display

- › The Power LED indicates the operating voltage on the bus.
- › The Fault LED indicates if a fault has been detected on the AS-Interface bus.
- › The green and the red LEDs can be controlled as required by the control system via the bus using bits D1 and D2.

### Auxiliary release

Is used for releasing the guard locking with the aid of a tool. To protect against tampering, the auxiliary release is sealed with sealing lacquer.

### Approvals



### Mechanical values and environment

Housing material	Alloy - die-cast
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	
According to As-i Safety at Work	1 D0,D1 [1]
Number of guard lock monitoring positively driven contacts	
According to As-i Safety at Work	1 D2,D3 [2]
Connection	
1 x	Plug connector M12 [3]
Approach speed	
max.	20 m/min
Actuation frequency	1200 1/h
Guard locking principle	Closed-circuit current principle
Locking force F <sub>max</sub>	3000 N
Locking force F <sub>Zh</sub>	2300 N
Retention force	20 N

Extraction force	30 N
Actuating force	35 N
Insertion depth	24,5 mm

### Electrical connection ratings

ASi voltage	22,5 ... 30 V 31,6 V
ASi operating current	max.45 mA
ASi auxiliary voltage	
IEC 60742, PELV	24 V -15% ... +10%
ASi auxiliary current	300 mA
Solenoid duty cycle	100 %
ASi slave type	
According to ASI specification 2.1	EA code: 7
According to ASI specification 2.1	ID code: B
ASi data in	
According to ASI safety at work	D0,D1,D2,D3 [4]
ASi data out	
Guard locking solenoid	D0 [5]
LED red	D1 [6]
LED green	D2 [7]
ASi LED	
LED green	Power [8]
LED red	Fault [9]

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

B10 <sub>D</sub>	11,5 x 10 <sup>6</sup>
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### in combination with Actuator BETAETIGER-S-GT-SN

### Mechanical values and environment

Overtravel	5 mm
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[1] 1 = Door closed

[2] 1 = Locked

[3] 4-pin

[4] See positively driven NC contact

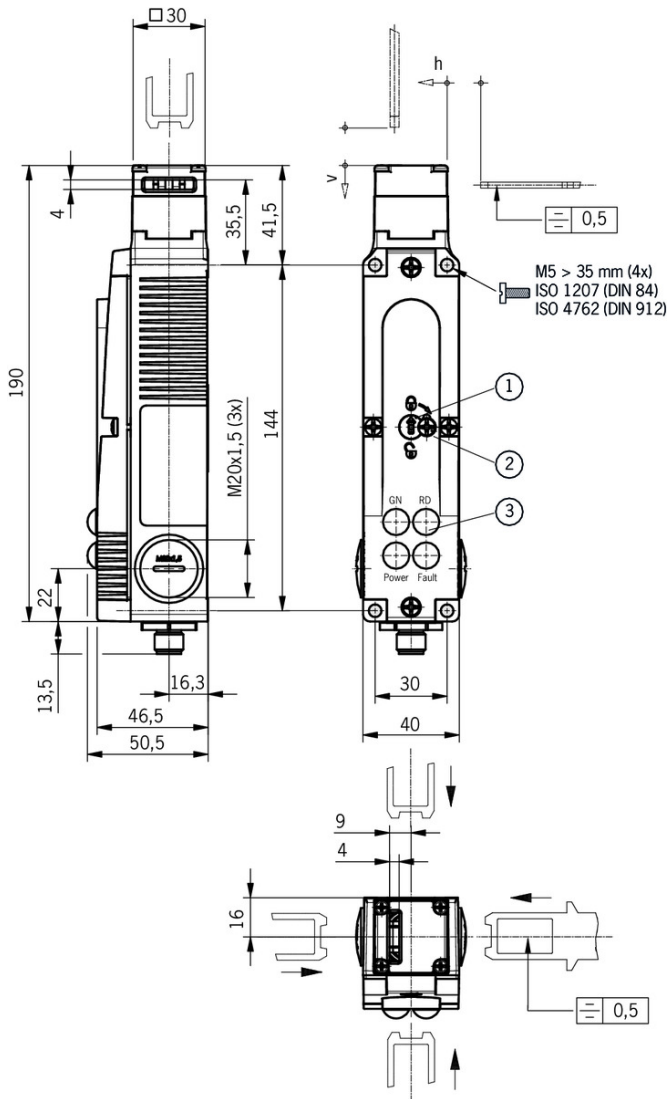
[5] 1 = Solenoid energized

[6, 7] 1 = LED on

[8] ASI voltage is present

[9] Offline phase or address 0

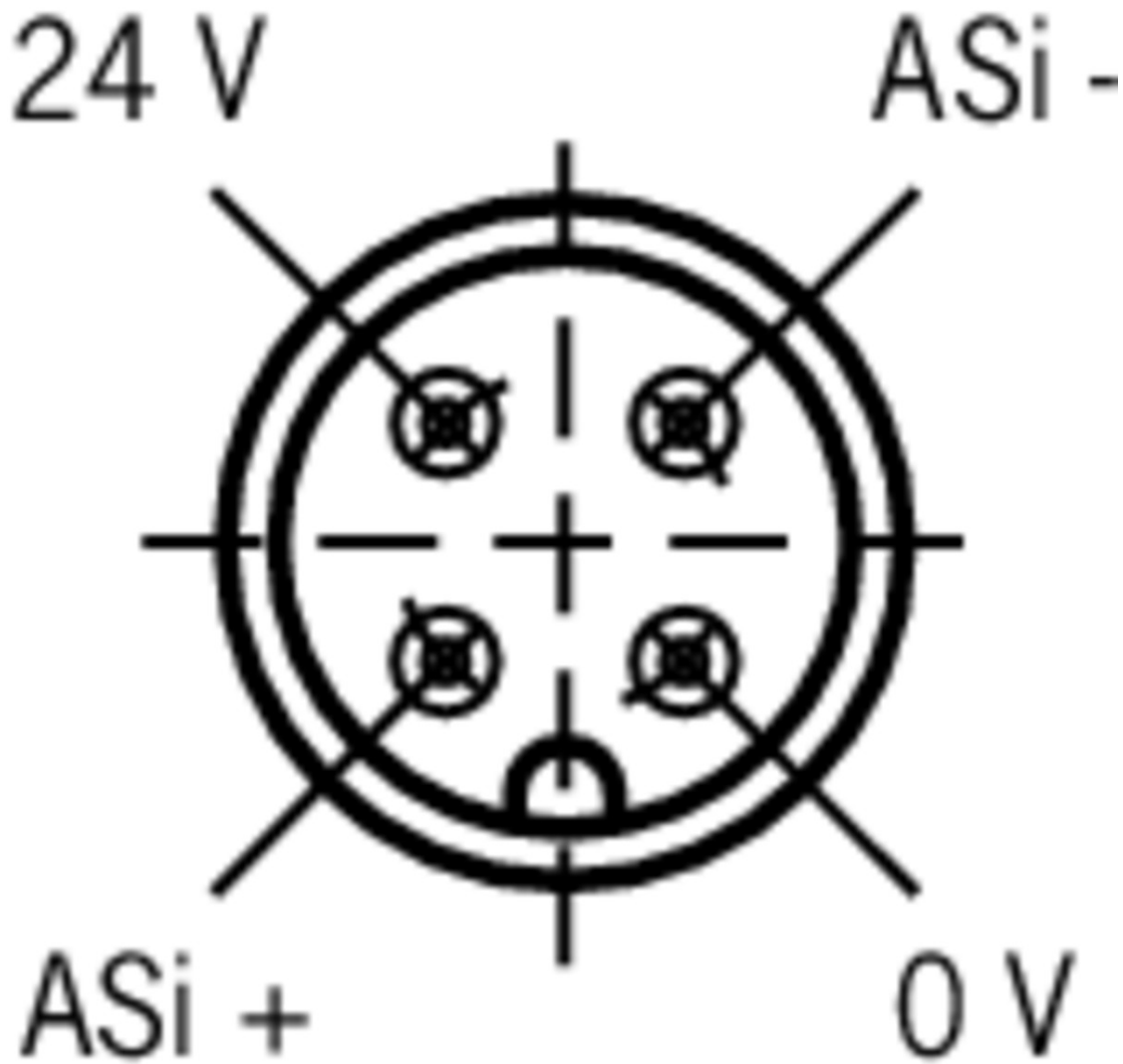
## Dimension drawing



## Legende

- 1 Auxiliary release
- 2 Locking screw
- 3 LED indicator

## Connector assignment



## Legende

View of connection side

## Actuator

▼ Actuator S for safety switches SGA/SGP/STA/STP/STM



**097861** BETAETIGER-S-G-SN-C2115

▼ Features

- › Two safety screws included
- › Physically compatible with TP actuator P-G



**095738** BETAETIGER-S-GT-SN

▼ Features

- › Two safety screws included
- › Actuators with rubber bushings

- 
- ▼ Actuator S, bent, for safety switches SGA/SGP/STA/STP/STM



**095740** BETAETIGER-S-WQT-SN

- ▼ Features
  - › Two safety screws included

- 
- ▼ Hinged actuator L top/bottom, for safety switches SGA/SGP/STA/STP/STM for insertion funnel



**096697** RADIUSBETAETIGER-S-OU-LN

- ▼ Features
  - › Actuators made of stainless steel
  - › Two stainless safety screws per actuator
  - › For doors hinged at top and bottom

- 
- ▼ Hinged actuator L left/right, for safety switches SGA/SGP/STA/STP/STM for insertion funnel



**096844** RADIUSBETAETIGER-S-LR-LN

- ▼ Features
  - › Actuators made of stainless steel
  - › Two stainless safety screws per actuator
  - › For doors hinged on right and left

- 
- ▼ Hinged actuator S top/bottom for safety switches SGA/SGP/STA/STP/STM



**095315** RADIUSBETAETIGER-S-OU-SN

- ▼ Features
  - › Actuators made of stainless steel
  - › Two safety screws included
  - › For doors hinged at top and bottom

- 
- ▼ Hinged actuator S left/right for safety switches SGA/SGP/STA/STP/STM



**096838** RADIUSBETAETIGER-S-LR-SN

- ▼ Features
  - › Actuators made of stainless steel
  - › Two safety screws included
  - › For doors hinged on right and left

- 
- ▼ Actuator L for safety switches SGA/SGP/STA/STP/STM for insertion funnel



**095739** BETAETIGER-S-GT-LN

- ▼ Features
  - › Two safety screws included
  - › Actuators with rubber bushings

- 
- ▼ Actuator L, bent, for safety switches SGA/SGP/STA/STP/STM for insertion funnel

**095741** BETAETIGER-S-WQT-LN

- ▼ Features



- › Two safety screws included
- › Actuators with rubber bushings

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## Mounting accessories

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



**093457** EMP-B1

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- ❑ Mounting plates EMP-SB for safety switches CTP, TP...A, STA, STP and TX



**093456** EMP-SB

❑ Features

- › For vertical and horizontal mounting of safety switches TP...A, STA, STP and TX

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



**093458** EMP-B2

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## Bolt

- 
- ❑ Bolt STP-GFK for safety switches STA, STP, SGP and SGA



**098121** RIEGEL STP-GFK

❑ Features

- › Fiber glass reinforced plastic bolt
- › For doors hinged on the left or right
- › Can be locked in open position with padlocks
- › Actuator included

- 
- ❑ Bolt S-... for safety switches STA, STP, SGP and SGA



**096384** RIEGEL S-A

❑ Features

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



**096385** RIEGEL S-C

❑ Features

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

- ▼ Bolt BTC-ST/G... without escape release for safety switches STA, STP, SGP and SGA



**106284** BTC-ST/G-S-TH-00-X

▼ Features

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

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## Function expansion

- ▼ Insertion funnel for safety switches SGP/STA/STP/STM/SGA



**093157** EINFUEHRTRICHTER-S

- ▼ Emergency unlocking for safety switches STA



**099876** NOTENTSPERRUNG STA

- ▼ Lockout bar STA/STP/SGA/SGP/STM



**105701** SPERREINSATZ STP/STA

▼ Features

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

- ▼ Wire front release



**096230** AE-B-A1-02,0-096230

▼ Features

- › Can be used as escape release or emergency unlocking
- › No automatic return
- › Sheath length 2 m (rope length 6 m)



**097747** AE-B-A1-02,0-F-097747

▼ Features

- › Can be used as escape release or emergency unlocking
- › automatic return
- › Sheath length 2 m (rope length 6 m)



**098313** AE-B-A1-03,0-098313

▼ Features

- › Can be used as escape release or emergency unlocking
- › No automatic return
- › Sheath length 3 m (rope length 6 m)

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**111233** AE-B-A1-03,0-F-111233





✓ Features

- › Can be used as escape release or emergency unlocking
- › automatic return
- › Sheath length 3 m (rope length 6 m)



**098314** AE-B-A1-04,0-098314

✓ Features

- › Can be used as escape release or emergency unlocking
- › No automatic return
- › Sheath length 4 m (rope length 6 m)



**125582** AE-B-A1-06,0-125582

✓ Features

- › Can be used as escape release or emergency unlocking
- › No automatic return
- › Rope length 6 m (without sheath)



**124770** AE-B-A1-06,0-F-124770

✓ Features

- › Can be used as escape release or emergency unlocking
- › automatic return
- › Rope length 6 m (without sheath)

## Connection material

✓ Bus coupling module with plug connector M12, 5-pin








**105756** BCM-A-P2-SEM4-1

✓ Features

- › Conversion from M12 to ribbon cable
- › Very compact design
- › Easy handling

## Instructions







✓ Betriebsanleitung Sicherheitsschalter STA...AS1

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter STA...AS1 Operating Instructions Safety Switches STA...AS1	099108	04-08/15	 	 1.6 MB
Инструкция по эксплуатации предохранительных выключателей STA...AS1	099108	04-08/15		 0.4 MB


## Catalogs

✓ Sicherheitsschalter mit AS-Interface Safety Switches with AS-Interface Interrupteurs de sécurité

avec AS-Interface

	Doc. no.	Version	Language	Download
Sicherheitsschalter mit AS-Interface	092164	11-04/17		 2.3 MB
Interrupteurs de sécurité avec AS-Interface	112564	11-04/17		 2.3 MB
Safety Switches with AS-Interface	092332	11-04/17		 2.3 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