

## ITEM 097790 STP3A-4141A024SEM4AS1

Description	Technical data	Accessories	Downloads
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### Features

- › Actuating head made of metal
- › Auxiliary release on the front

### Guard locking type

**STP3** 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

**D0** Guard locking solenoid

**D1** Red LED

**D2** Green LED

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### 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.

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### 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	Reinforced thermoplastic
Weight	
	Net 0,5 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>	2500 N
Locking force F <sub>Zh</sub>	2000 N

Retention force	20 N
Extraction force	30 N
Actuating force	35 N

### 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>	$5 \times 10^6$
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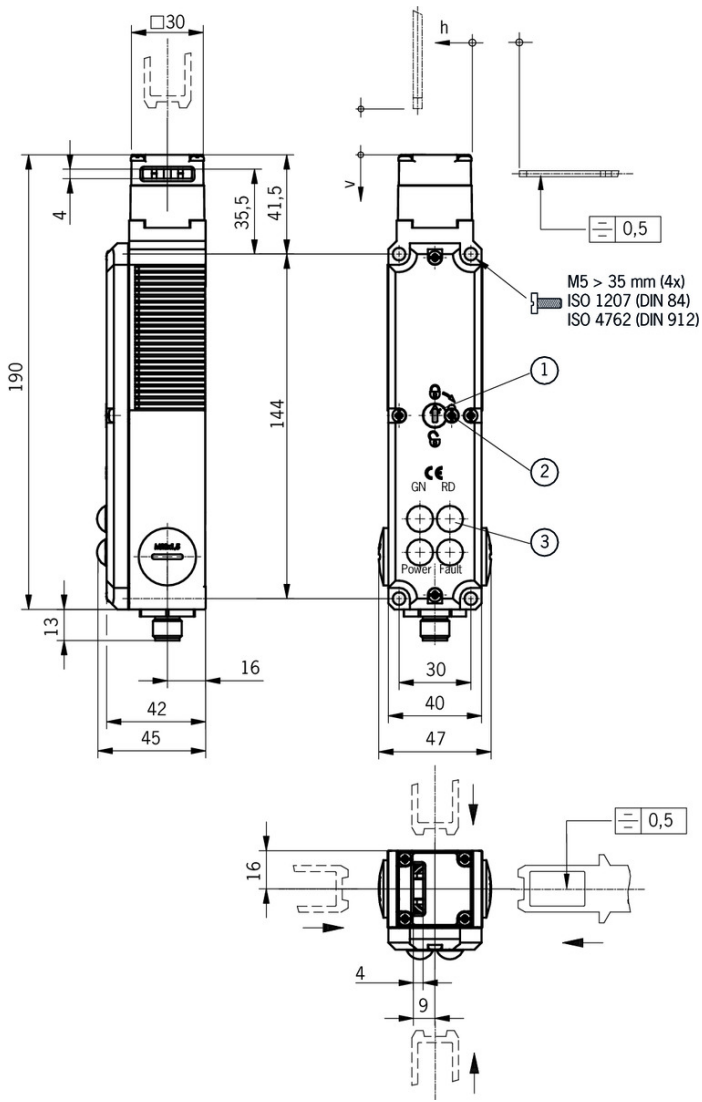
### in combination with Actuator BETAETIGER-S-GT-SN

### Mechanical values and environment

Overtravel		
	Horizontal	5 mm
	Vertical	5 mm
Insertion depth		
	Horizontal	24,5 mm
	Vertical	24,5 mm

- [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

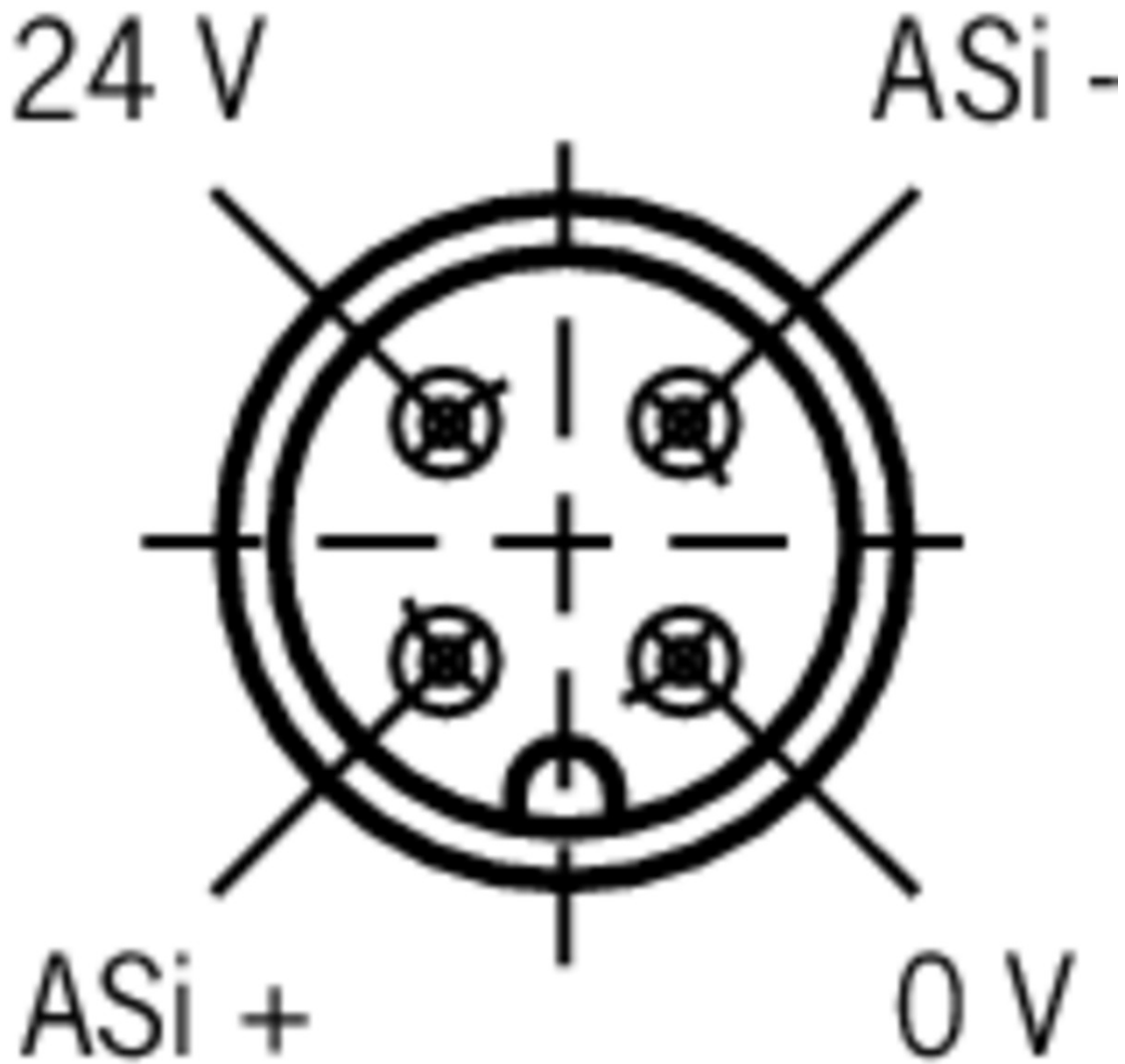
**Dimension drawing**



**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

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



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

▼ Features

- › Two safety screws included



**115073** BETAETIGER-S-W-SN-C2115

▼ Features

- › Two stainless safety screws per actuator
- › Minimum door radius 300 mm



**105808** BETAETIGER-S-WT-SN-C2115

▼ Features

- › Two stainless safety screws per actuator
- › Actuators with rubber bushings
- › Minimum door radius 300 mm

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▼ 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

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▼ 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



**105809** BETAETIGER-S-WT-LN-C2115

▼ Features

- › Two stainless safety screws per actuator
- › Actuators with rubber bushings
- › Minimum door radius 300 mm

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▼ 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

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▼ 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
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- ✓ 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
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## Function expansion

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



- 093157** EINFUEHRTRICHTER-S
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- ✓ Lock for auxiliary release for safety switches CTP/TP/STP



- 084177** SCHLOSS TP VERSCHIEDENSCHLIESSEND
    - ✓ Features
      - › Lock unique locking
      - › Key removable in “unlocked” and “locked” positions
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- 086236** SCHLOSS TP GLEICHSCHLIESSEND
    - ✓ Features
      - › Identical locking
      - › Key removable in “unlocked” and “locked” positions
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- 109212** SCHLOSS TP GLEICHSCHLIESSEND C2293
    - ✓ Features
      - › Identical locking
      - › Key can be removed only in “locked” position
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- ✓ Emergency unlocking for safety switches CTP/TP/STP

- 099877** NOTENTSPERRUNG TP/STP



Release with automatic reset for safety switches CTP/TP/STP



**103110** ENTRIEGELUNG RUECKSTELLEND TP/STP



Handle for wire front release



**099795** AY-HDL-099795

Features

- › Suitable for all wire front releases



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)



**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)





#### **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)



#### **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)

## Mounting accessories

### ▼ 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-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

## Spare parts

### ▼ Replacement key for mechanical key release



#### **099434** ERSATZSCHLUESSEL GLEICHSCHL.0354

## Bolt

### ▼ 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 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 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

## 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 STP...AS1

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter STP...AS1	097810	04-07/15		0.9 MB
Operating Instructions Safety Switches STP...AS1	097810	04-07/15		0.9 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