

## ITEM 097789 STP4A-4141A024SEM4AS1

Description	Technical data	Accessories	Downloads
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### Features

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

### Guard locking type

**STP4** Open-circuit current principle, guard locking by control of AS-i output  
0. Release by spring force.

### 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

### 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	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	Open-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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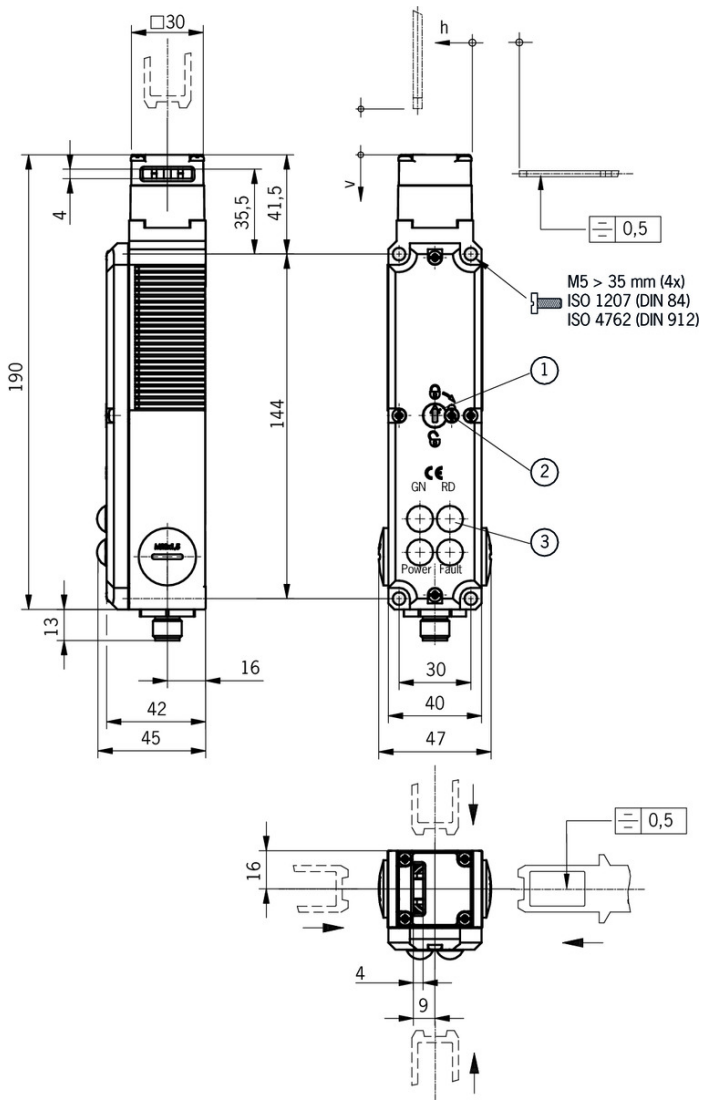
### in combination with Actuator BETAETIGER-S-GT-SN

### 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

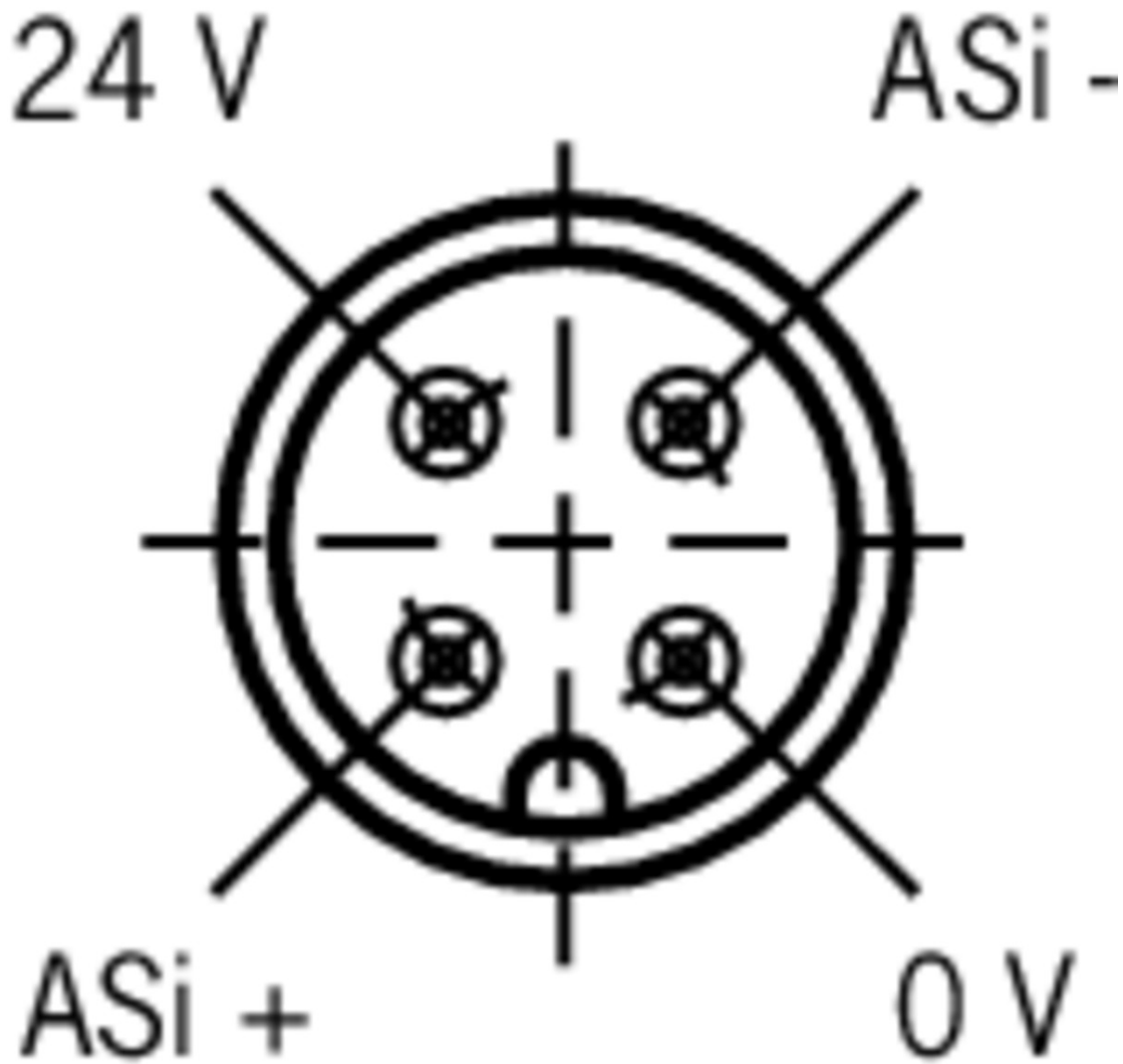
**Dimension drawing**



**Legende**

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

## Connector assignment



## Legende

View of connection side

## Actuator

Actuator S, 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
- 

✓ 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
- 

✓ 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
- 

✓ 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

- ▼ 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

## 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-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

## Function expansion

- ▼ 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



**086236** SCHLOSS TP GLEICHSCHLIESSEND

✓ Features

- › Identical locking
- › Key removable in “unlocked” and “locked” positions



**109212** SCHLOSS TP GLEICHSCHLIESSEND C2293

✓ Features

- › Identical locking
- › Key can be removed only in “locked” position

✓ Emergency unlocking for safety switches CTP/TP/STP



**099877** NOTENTSPERRUNG TP/STP

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



**093157** EINFUEHRTRICHTER-S

✓ 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)

## 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	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				

### CAD data

CAD data for this item on TraceParts