

## ITEM 088256 TP3-4141A024SEM4AS1

Description	Technical data	Accessories	Downloads
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### Features

- › Auxiliary release on the front
- › Increased horizontal overtravel
- › Optional without guard lock monitoring

### Guard locking types

- TP3** Closed-circuit current principle, guard locking by spring force. Release by control of AS-i output 0.
- TP4** 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, version AS1

- D0, D1** Door monitoring contact SK  
**D2, D3** Solenoid monitoring contact ÜK

## AS-Interface inputs, version AS1

**D0, D1** Door monitoring contact SK 1

**D2, D3** Door monitoring contact SK 2

Evaluation is performed via a safety monitor.

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## 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
Retention force	10 N
Extraction force	20 N
Actuating force	10 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>	$3 \times 10^6$
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### in combination with Actuator BETAETIGER-P-GT

#### Mechanical values and environment

Overtravel		
	Horizontal	2 mm
	Vertical	1,5 mm
Insertion depth		
	Horizontal	28 mm
	Vertical	29,5 mm

### in combination with Actuator BETAETIGER-P-GNT

#### Mechanical values and environment

Overtravel	Horizontal	7 mm
Insertion depth	Horizontal	28 mm

**[1]** 1 = Door closed

**[2]** 1 = Locked

**[3]** 4-pin

**[4]** See positively driven NC contact

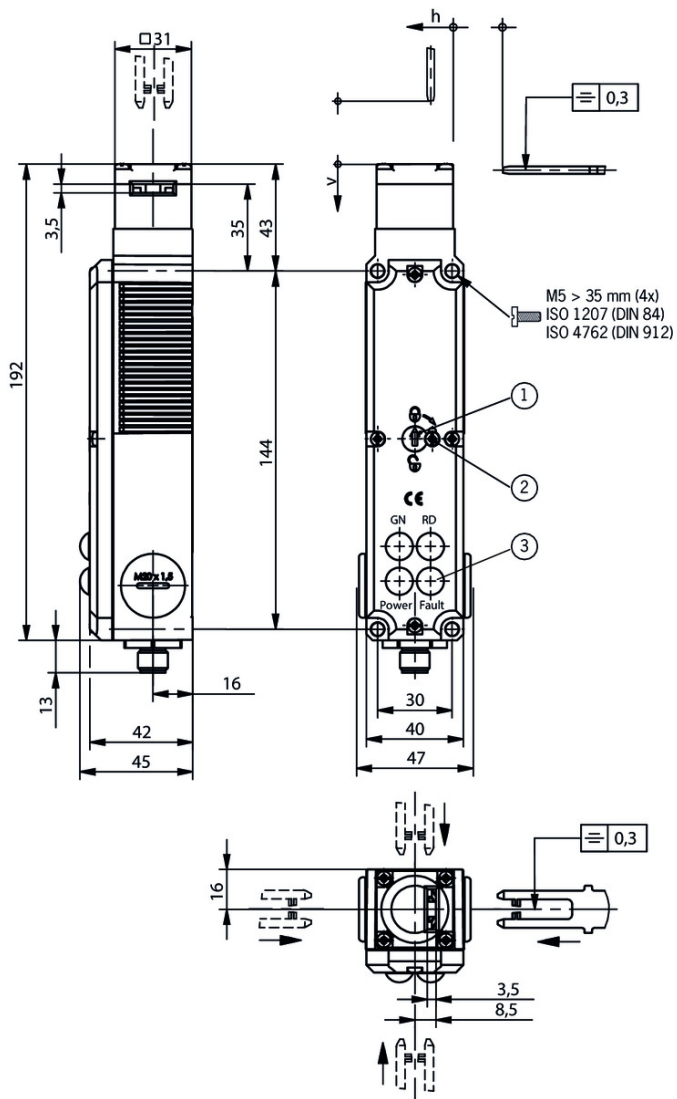
**[5]** 1 = Solenoid energized

**[6, 7]** 1 = LED on

**[8]** ASI voltage is present

**[9]** Offline phase or address 0

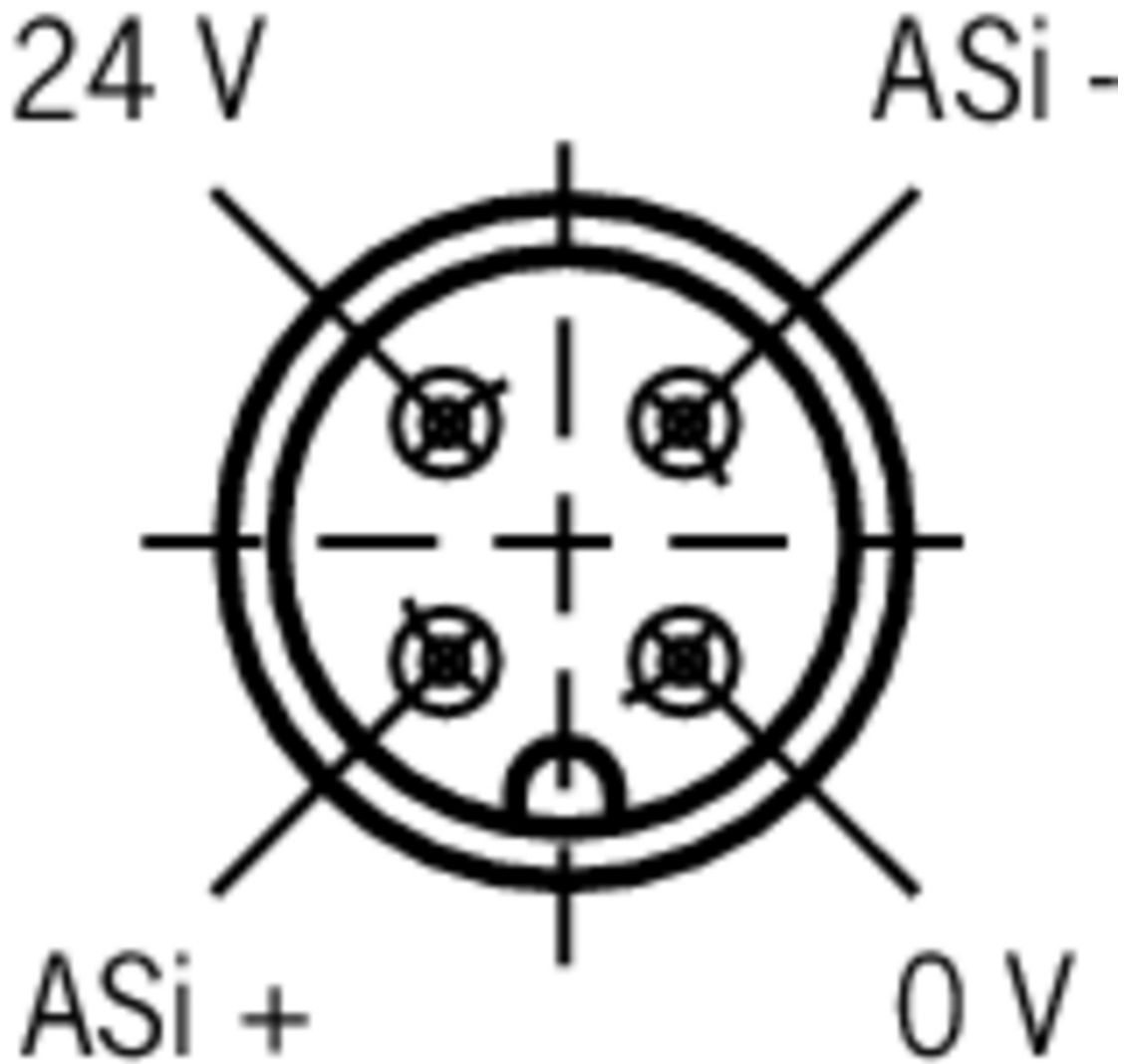
## Dimension drawing



## Legende

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

## Connector assignment



## Legende

View of connection side

## Actuator

Actuators for safety switches NP/GP/TP



**059226** BETAETIGER-P-G

Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator



**070046** BETAETIGER-P-GT

Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator

- › Actuators with rubber bushings
- 

▼ Bent actuator for safety switches NP/GP/TP



**059227** BETAETIGER-P-W

▼ Features

- › Actuators made of stainless steel
  - › Two stainless safety screws per actuator
- 



**070038** BETAETIGER-P-WT

▼ Features

- › Actuators made of stainless steel
  - › Two stainless safety screws per actuator
  - › Actuators with rubber bushings
- 

▼ Actuators for safety switches NP/GP/TP, increased overtravel



**074570** BETAETIGER-P-GN

▼ Features

- › Actuators made of stainless steel
  - › Two stainless safety screws per actuator
- 



**074576** BETAETIGER-P-GNT

▼ Features

- › Actuators made of stainless steel
  - › Two stainless safety screws per actuator
  - › Actuators with rubber bushings
- 

▼ Bent actuator for safety switches NP/GP/TP, increased overtravel



**074571** BETAETIGER-P-WN

▼ Features

- › Actuators made of stainless steel
  - › Two stainless safety screws per actuator
- 



**074577** BETAETIGER-P-WNT

▼ Features

- › Actuators made of stainless steel
  - › Two stainless safety screws per actuator
  - › Actuators with rubber bushings
- 

▼ Hinged actuator top/bottom for safety switches NP/GP/TP



**070050** RADIUSBETAETIGER-P-OU

▼ Features

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

- ▼ Hinged actuator left/right for safety switches NP/GP/TP



**059440** RADIUSBETAETIGER-P-LR

▼ Features

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

- ▼ Hinged actuator top/bottom for safety switches NP/GP/TP, increased overtravel



**074572** RADIUSBETAETIGER-P-OUN

▼ Features

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

- ▼ Hinged actuator left/right for safety switches NP/GP/TP, increased overtravel



**074573** RADIUSBETAETIGER-P-LRN

▼ Features

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

## Bolt

- ▼ Bolt 0 NP/TP for safety switches NP, GP and TP



**073535** RIEGEL 0 NP/TP OHNE RASTUNG

▼ Features

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

- ▼ Bolt 1 NP/TP for safety switches NP, GP and TP



**073536** RIEGEL 1 NP/TP 1X RASTUNG ZU

▼ Features

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

- ▼ Bolt TP/GP... for safety switches GP and TP



**084430** RIEGEL TP-A

▼ Features

- › Steel bolt
- › For doors hinged on the right



- › Can be locked in open position with padlocks
- › Actuator included



**084432** RIEGEL TP-C

✓ Features

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

✓ Bolt TP-GFK for safety switches TP and GP



**096616** RIEGEL TP-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-T/GP... without escape release for safety switches GP and TP



**106301** BTC-T/GP-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

## Function expansion

✓ Insertion funnel for safety switches NP..A/GP/TP..A



**086237** EINFUEHRTRICHTER-P

✓ Lockout bar NP/GP/TP



**096105** SPERREINSATZ TP

✓ Features

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

✓ Lock for auxiliary release for safety switches CTP/TP/STP



**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



**084177** SCHLOSS TP VERSCHIEDENSCHLIESSEND

▼ Features

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

▼ 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

▼ 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)



**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)



**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)



**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)



**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)



**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)

▼ Handle for wire front release



**099795** AY-HDL-099795

▼ Features

- › Suitable for all wire front releases

▼ Latch spring for increased retention force

**076501** RASTFEDER NP/TP

## 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

## 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 TP...AS1

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter TP...AS1 Operating Instructions Safety Switches TP...AS1	089717	08-08/15	 	1.7 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