

## Datasheet - AZ 200ST-T-AS

AS interface safety at work / Safety switchgear / Safety switches / AZ 200 AS



Preferred typ



- Safety switch with separate actuator
- Thermoplastic enclosure
- Integrated AS-Interface
- 40 mm x 220 mm x 50 mm
- 3 LEDs to show operating conditions
- Sensor technology permits an offset between actuator and interlock of  $\pm 5$  mm vertically and  $\pm 3$  mm horizontally
- Intelligent diagnosis
- With door detection sensor T
- Protection class IP67

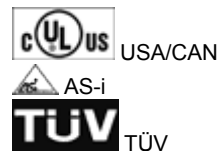
(Minor differences between the printed image and the original product may exist!)

### Ordering details

Product type description	AZ 200ST-T-AS
Article number	101190950
EAN Code	4030661356440
eCl@ss	27-27-26-02

### Approval

Approval




### Classification

Standards	EN ISO 13849-1, IEC 61508, IEC 60947-5-3
PL	up e
Control category	up 4
PFH	$4.0 \times 10^{-9}/h$
SIL	3
Mission time	20 Years
Classification	PDF-M

## Global Properties

---

Permanent light	AZ 200 AS
Standards	IEC 60947-5-3, IEC 61508, EN ISO 13849-1, EN 60947-5-1, EN 50295
Compliance with the Directives (Y/N) 	Yes
Suitable for safety functions (Y/N)	Yes
Active principle	Non-contact
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
Housing coating	None
Weight	335
Actuator monitored (Y/N)	Yes
Response time	< 60
Duration of risk	> 120
Time to readiness	4000


## Mechanical data

---

Design of electrical connection	connector plug M12, 4-pole
Mechanical life	≥ 1.000.000 operations
Switch distance $S_n$	6.5 mm
Ensured switch distance ON $S_{ao}$	4 mm
Ensured switch distance OFF $S_{ar}$	30 mm
hysteresis	max. 1.5
Repeat accuracy $R_R$	< 0,5 mm
resistance to shock	30 g / 11 ms
Resistance to vibration	10 ... 55 HZ, Amplitude 1 mm
Emergency unlocking device (Y/N)	No
Manual release (Y/N)	No
Emergency release (Y/N)	No
Latching force	30
Max. Actuating speed	≤ 0,2

## Ambient conditions

---

Ambient temperature	
- Min. environmental temperature	-25
- Max. environmental temperature	+70
Storage and transport temperature	
- Min. Storage and transport temperature	-25
- Max. Storage and transport temperature	+85
Relative humidity	30... 95
- non-condensing	
Protection class	IP67 to IEC/EN 60529
Protection rating	II 
Air clearances and creepage distances $T_o$ IEC/EN 60664-1	
- Rated impulse withstand voltage $U_{imp}$	0,8 kV
- Rated insulation voltage $U_i$	32 VDC
- Overvoltage category	III
- Degree of pollution	3

## Electrical data - AS interface

---

AS-i Supply voltage	26.5 ... 31.6 VDC, Protection against polarity reversal
---------------------	---

AS-i operating current	≤ 50
AS-i Device insulation	internally short-circuit proof
AS-i Specification	
- version	V 2.1
- Profile	S-0.B.F.E
- IO-Code	0x0
- ID-Code	0xB
- ID-Code1	0xF
- ID-Code2	0xE
AS-i Inputs	
- Channel 1	Data bits DI 0/DI 1= dynamic code transmission
- Channel 2	Data bits DI 2/DI 3= dynamic code transmission
AS-i Outputs	DO 0 ... DO 3 not used
AS-i Parameter bits	
- P0	Safety guard and actuator detected
- P1	Safety release
- P2	static 0
- P3	Error
AS-i input module address	0
- Default on address 0, programmable via the AS-Interface Master or Hand-held programming device	

### LED switching conditions display

---

LED switching conditions display (Y/N)	Yes
AS-i LED switching conditions display	
(1) green/red LED (AS-i duo LED)	Supply voltage / Communication error / slave address = 0
(2) red LED	device error
(3) yellow LED	Device status

### ATEX

---

Explosion protection categories for gases	None
Explosion protected category for dusts	None

### Dimensions

---

Dimensions of the sensor	
- Width of sensor	40
- Height of sensor	220
- Length of sensor	50

### Pin assignment

---

1	AS-i +
2	None (≤ 30 VDC)
3	AS-i -
4	None (≤ 30 VDC)

### Included in delivery

---

Actuators must be ordered separately.

### Documents

---

**Operating instructions and Declaration of conformity (fr)** 282 kB, 24.01.2018

Code: mrl\_az200as\_fr

**Operating instructions and Declaration of conformity (it)** 279 kB, 09.01.2018

Code: mrl\_az200as\_it

**Operating instructions and Declaration of conformity (pl)** 293 kB, 19.04.2018

Code: mrl\_az200as\_pl

**Operating instructions and Declaration of conformity (nl)** 280 kB, 02.08.2018

Code: mrl\_az200as\_nl

**Operating instructions and Declaration of conformity (de)** 259 kB, 16.11.2017

Code: mrl\_az200as\_de

**Operating instructions and Declaration of conformity (pt)** 283 kB, 09.01.2018

Code: mrl\_az200as\_pt

**Operating instructions and Declaration of conformity (en)** 280 kB, 16.11.2017

Code: mrl\_az200as\_en

**Operating instructions and Declaration of conformity (jp)** 757 kB, 14.11.2011

Code: mrl\_az200as\_jp

**Operating instructions and Declaration of conformity (es)** 287 kB, 11.01.2018

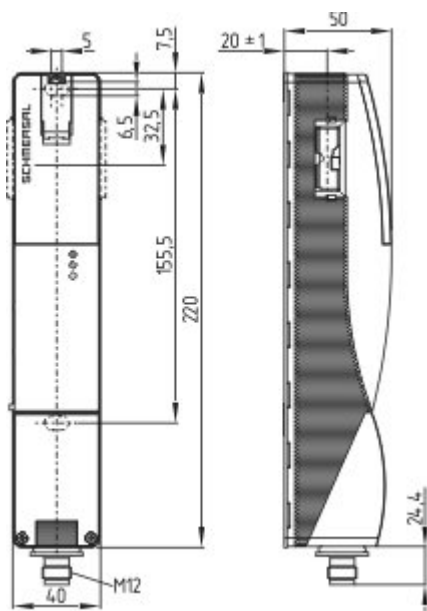
Code: mrl\_az200as\_es

**TÜV certification (de, en)** 848 kB, 09.08.2017

Code: z\_azmp04

## Images

---



Dimensional drawing (miscellaneous)

---

## System components

---

## Actuator



### 101183470 - AZ/AZM 200-B1-RTP0

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel



### 101183469 - AZ/AZM 200-B1-RT

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel



### 101183466 - AZ/AZM 200-B1-LTP0

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel



### 101183465 - AZ/AZM 200-B1-LT

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel



### 101178680 - AZ/AZM 200-B30-RTAG1

- Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability



### 101178738 - AZ/AZM 200-B30-RTAG1P1

- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

### 101186144 - AZ/AZM 200-B30-RTAG1P20

- One-hand emergency exit, even in de-energised condition
- Actuator for hinged guards
- With door detection sensor T



- Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101192103 - AZ/AZM 200-B30-RTAG1P25**



- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101181139 - AZ/AZM 200-B30-RTAG2**



- Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101181143 - AZ/AZM 200-B30-RTAG2P1**



- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101191659 - AZ/AZM 200-B30-RTAG2P20**



- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101192104 - AZ/AZM 200-B30-RTAG2P25**

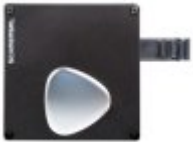
- One-hand emergency exit, even in de-energised condition
- Actuator for hinged guards



- With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101181137 - AZ/AZM 200-B30-LTAG2**



- Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101181141 - AZ/AZM 200-B30-LTAG2P1**



- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101189020 - AZ/AZM 200-B30-LTAG2P20**



- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101192106 - AZ/AZM 200-B30-LTAG2P25**



- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101178681 - AZ/AZM 200-B30-LTAG1**

- Actuator for hinged guards
- With door detection sensor T
- Easy and intuitive operation



- No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101178668 - AZ/AZM 200-B30-LTAG1P1**



- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101186150 - AZ/AZM 200-B30-LTAG1P20**



- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability

---

**101192102 - AZ/AZM 200-B30-LTAG1P25**



- One-hand emergency exit, even in de-energised condition
  - Actuator for hinged guards
  - With door detection sensor T
  - Easy and intuitive operation
  - No risk of injury from protruding actuator
  - No supplementary door handles required
  - Does not protrude into the door opening
  - Various handles available
- Greater mechanical stability