

Datasheet - AZ201-I2-ST2-T-1P2P

Safety switch with separate actuator / AZ201



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

- Thermoplastic enclosure
- RFID-technology for needs-based protection against tampering
- Max. length of the sensor chain 200 m
- Self-monitoring series-wiring of 31 sensors
- 3 LEDs to show operating conditions
- Sensor technology permits an offset between actuator and interlock of ± 5 mm vertically and ± 3 mm horizontally
- Suitable for hinged and sliding guards
- Intelligent diagnosis
- Repeated individual coding with RFID technology
- Coding level "High" according to ISO 14119

Ordering details

Product type description	AZ201-I2-ST2-T-1P2P
Article number	103015819
EAN Code	4030661504339
eCl@ss	27-27-26-02

Approval


Approval



Classification

Standards	EN ISO 13849-1, IEC 61508
PL	up e
Control category	up 4
PFH	1.9×10^{-9}
PFD value	1.6×10^{-4}
SIL	3
Mission time	20 Years

Global Properties

Permanent light	AZ201
Standards	IEC 60947-5-1, IEC 60947-5-3, ISO 14119, ISO 13849-1, IEC 61508, IEC 62061
Compliance with the Directives (Y/N) 	Yes
Suitable for safety functions (Y/N)	Yes
Protection rating	III
Series-wiring	up to 31 components
Length of the sensor chain	200
Active principle	RFID, 125 kHz
Coding levels according to ISO 14119	High
Coding	Individual coding, multiple teaching
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
Housing coating	None
Weight	550 g
Idle assignable pushbutton and LED (Y/N)	No
Response time	
- Actuator	≤ 100 ms
- Inputs	≤ 0,5 ms
Duration of risk	< 200 ms
Time to readiness	< 4000 ms
Recommended actuator	AZ/AZM201-B1, AZ/AZM201-B30

Mechanical data

Design of electrical connection	Connector M12, 8-pole
Cable section	
- Min. Cable section	-
- Max. Cable section	-
AWG-Number	-
Mechanical life	≥ 1.000.000 operations
notice	-
restistance to shock	30 / 11
Resistance to vibration	10 ... 150 HZ, Amplitude 0,35 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	IP66, IP67 to IEC/EN 60529
Air clearances and creepage distances To IEC/EN 60664-1	
- Rated impulse withstand voltage	0,8

- Overvoltage category	III
- Degree of pollution	3

Electrical data

Number of auxiliary contacts	0
Number of safety contacts	2
Cross circuit/short circuit recognition possible (Y/N)	Yes
Supply voltage	
- Min. supply voltage	20.4 VDC
- Max. supply voltage	26.4 VDC
Switch frequency	1 HZ
Rated insulation voltage	32 VDC
Operating current	0,7 A
Utilisation category	DC-13
No-load current	0,1 A
Device insulation	≤ 4 A if used in accordance with UL 508

Electrical data - Safety inputs

Safety inputs	X1 and X2
Rated operating voltage	- 3 ... 5 (Low) 15 ... 30 (High)
Operating current	typically 2 at 24

Electrical data - Safety outputs

Safety outputs	Y1 and Y2
Fuse rating	short-circuit proof, p-type
Rated operating voltage	0 ... 4 under
Residual current	≤ 0,5
Operating current	each 0,25 A
Utilisation category	DC-13

Electrical data - Diagnostic output

Serial diagnostics (Y/N)	No
Fuse rating	p-type, short-circuit proof
Operating current	0,05 A
Utilisation category	DC-13: 24 V / 0,05 A
Wiring capacitance for serial diagnostics	-
Operating principle of the diagnostic output	The short-circuit proof diagnostic output OUT can be used for central visualisation or control tasks, e.g. in a PLC.
notice	The diagnostic output is not a safety-relevant output!

LED switching conditions display

LED switching conditions display (Y/N)	Yes
LED switching conditions display	
- Supply voltage	green LED
- switching condition	yellow LED
- Error functional defect	red LED

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	A1 Supply voltage
2	X1 Safety input 1
3	A2 GND
4	Y1 Safety output 1
5	OUT Diagnostic output
6	X2 Safety input 2
7	Y2 Safety output 2
8	-

Included in delivery

Actuators must be ordered separately.

Ordering code

AZ201(1)-T-(2)

(1)

SK	Screw connection
CC	Spring pulley connection
ST1	connector M23 x 1, 8+1-pole
ST2	connector M12 x 1, 8-pole

(2)

1P2P	1 Diagnostic output and 2 Safety outputs, p-type
SD2P	serial diagnostic output and 2 Safety outputs, p-type

Documents

Operating instructions and Declaration of conformity (pt) 153 kB, 16.10.2017

Code: mrl_az201_pt

Operating instructions and Declaration of conformity (fr) 343 kB, 19.10.2017

Code: mrl_az201_fr

Operating instructions and Declaration of conformity (it) 315 kB, 16.10.2017

Code: mrl_az201_it

Operating instructions and Declaration of conformity (pl) 364 kB, 02.03.2018

Code: mrl_az201_pl

Operating instructions and Declaration of conformity (es) 152 kB, 16.10.2017

Code: mrl_az201_es

Operating instructions and Declaration of conformity (nl) 341 kB, 02.08.2018

Code: mrl_az201_nl

Operating instructions and Declaration of conformity (en) 313 kB, 04.10.2017

Code: mrl_az201_en

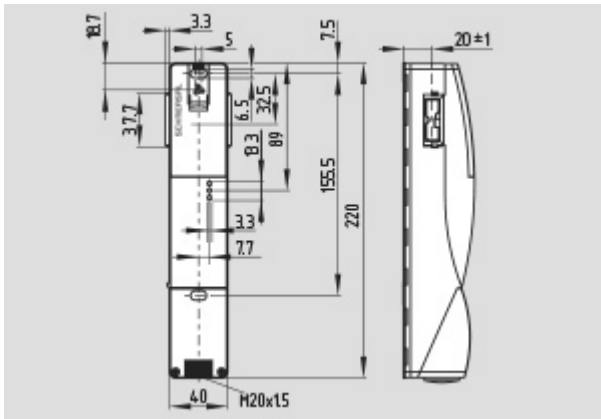
Operating instructions and Declaration of conformity (de) 301 kB, 04.10.2017

Code: mrl_az201_de

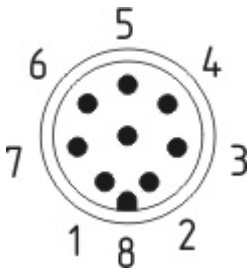
TÜV certification (de, en) 352 kB, 06.02.2018

Code: z_azmp07

Images



Dimensional drawing (miscellaneous)



Contact arrangement

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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