



AZM 200ST2-T-1P2PW

- Guard locking monitored
- Connector M12, 8-pole
- Thermoplastic enclosure
- Electronic contact-free, coded system
- Max. length of the sensor chain 200 m
- Self-monitoring series-wiring
- 3 LEDs to show operating conditions
- Sensor technology permits an offset between actuator and interlock of ± 5 mm vertically and ± 3 mm horizontally
- Intelligent diagnosis
- Manual release

Data

Ordering data

Note (Delivery capacity)	Not available!
Product type description	AZM 200ST2-T-1P2PW
Article number (order number)	101210048
EAN (European Article Number)	4030661384016
eCl@ss number, version 12.0	27-27-26-03
eCl@ss number, version 11.0	27-27-26-03
eCl@ss number, version 9.0	27-27-26-03
ETIM number, version 7.0	EC002593
ETIM number, version 6.0	EC002593

Approvals - Standards

Certificates

cULus
ATEX

General data

Standards	EN ISO 13849-1 EN IEC 60947-5-1 EN IEC 61508
Working principle	inductive
Housing material	Glass-fibre, reinforced thermoplastic
Reaction time, maximum	60 ms
Duration of risk, maximum	120 ms
Gross weight	609 g

General data - Features

Power to unlock	Yes
Solenoid interlock monitored	Yes
Manual release	Yes
Short circuit detection	Yes
Cross-circuit detection	Yes
Series-wiring	Yes
Safety functions	Yes
Integral system diagnostics, status	Yes
Number of safety contacts	2

Safety classification

Standards	EN ISO 13849-1 EN IEC 60947-5-3 EN IEC 61508
Mission time	20 Year(s)

Safety classification - Interlocking function

Performance Level, up to	e
Category	4
PFH value	4.00×10^{-9} /h

PFD value	1.00×10^{-4}
Safety Integrity Level (SIL), suitable for applications in	3
Mission time	20 Year(s)

Safety classification - Guard locking function

Performance Level, up to	d
Category	2
PFH value	2.50×10^{-9} /h
PFD value	2.20×10^{-4}
Safety Integrity Level (SIL), suitable for applications in	2
Mission time	20 Year(s)

Mechanical data

Mechanical life, minimum	1,000,000 Operations
Holding force F_{Zh} in accordance with EN ISO 14119	2,000 N
Note (clamping force F_{Zh})	1,000 N when used with the AZ/AZM201-B30 actuator, for indoor use.
Holding force F_{max} , maximum	2,600 N
Note (clamping force F_{max})	1,300 N when used with the AZ/AZM201-B30 actuator, for indoor use.
Latching force	30 N
Actuating speed, maximum	0.2 m/s
Tightening torque of the fastening screws for the housing cover, minimum	0.7 Nm
Tightening torque of the fastening screws for the housing cover, maximum	1 Nm
Note	Torx T10

Mechanical data - Connection technique

Termination	Connector M12, 8-pole
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Mechanical data - Dimensions

Length of sensor	50 mm
Width of sensor	40 mm
Height of sensor	220 mm

Ambient conditions

Degree of protection	IP67
Ambient temperature	-25 ... +60 °C
Storage and transport temperature	-25 ... +85 °C
Relative humidity, minimum	30 %
Relative humidity, maximum	95 %
Note (Relative humidity)	non-condensing
Resistance to vibrations	10 ... 55 Hz, amplitude 1 mm
Resistance to shock	30 g / 11 ms
Protection class	II

Ambient conditions - Insulation values

Rated insulation voltage U_i	32 VDC
Rated impulse withstand voltage U_{imp}	0.8 kV
Overvoltage category	III
Degree of pollution	3

Electrical data

Operating voltage	24 VDC -15 % / +10 %
No-load supply current I_0 , typical	600 mA
Rated operating voltage	24 VDC
Operating current	50 mA
Time to readiness, maximum	4,000 ms

Switching frequency, approx.	1 Hz
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Electrical fuse rating, maximum	2 A
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Electrical data - Magnet control

Switching thresholds	-3 V ... 5 V (Low) 15 V ... 30 V (High)
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Magnet switch-on time	100 %
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Electrical data - Safety digital inputs

Switching thresholds	-3 V ... 5 V (Low) 15 V ... 30 V (High)
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Current consumption at 24 V	5 mA
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Electrical data - Safety digital outputs

Rated operating current (safety outputs)	250 mA
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Voltage drop U_d , maximum	4 V
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Leakage current I_r , maximum	0.5 mA
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Voltage, Utilisation category DC-13	24 VDC
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Current, Utilisation category DC-13	0.25 A
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Electrical data - Diagnostic outputs

Voltage drop U_d , maximum	4 V
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Voltage, Utilisation category DC-13	24 VDC
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Current, Utilisation category DC-13	0.05 A
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Status indication

Note (LED switching conditions display)	Operating condition: LED green Error / functional defect: LED red Supply voltage UB: LED green
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Pin assignment

PIN 1	A1 Supply voltage UB
PIN 2	X1 Safety input 1
PIN 3	A2 GND
PIN 4	Y1 Safety output 1
PIN 5	OUT Diagnostic output
PIN 6	X2 Safety input 2
PIN 7	Y2 Safety output 2
PIN 8	IN Solenoid control

Scope of delivery

Scope of delivery	Actuator must be ordered separately. Triangular key for AZM 200
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Accessory

Recommendation (actuator)	AZ/AZM 200-B1
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Note

Note (General)	As long as the actuating unit remains inserted in the solenoid interlock, the unlocked safety guard can be relocked. In this case, the safety outputs are re-enabled, so that the safety guard must not be opened.
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Ordering code

Product type description:
AZM 200(1)(2)-T-(3)(4)

(1)

without

Guard locking monitored

B

Actuator monitored

(2)

SK

Screw connection

CC	Cage clamp
ST1	Connector M23 x 1, (8+1 pole)
ST2	Connector M12 x 1, 8 pole
(3)	
1P2P	1 serial diagnostic output and 2 p-type safety outputs
1P2PW	same as 1P2P, combined diagnostic signal: guard system closed and interlock locked
SD2P	serial diagnostic output and 2 p-type safety outputs
(4)	
without	Power to unlock
A	Power to lock

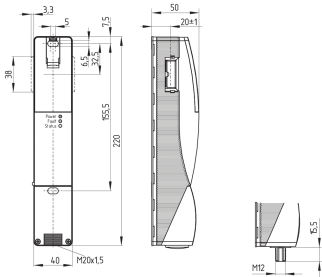
Pictures

Product picture (catalogue individual photo)



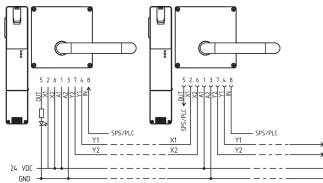
ID: kazm2f51
 | 2.0 MB | .jpg | 352.778 x 1696.861 mm - 1000 x 4810 px - 72 dpi
 | 350.3 kB | .png | 74.083 x 356.306 mm - 210 x 1010 px - 72 dpi
 | 21.7 kB | .jpg | 25.753 x 123.472 mm - 73 x 350 px - 72 dpi

Dimensional drawing basic component



ID: 1azm2g12
 | 146.3 kB | .jpg | 352.778 x 308.681 mm - 1000 x 875 px - 72 dpi
 | 5.3 kB | .png | 74.083 x 64.911 mm - 210 x 184 px - 72 dpi
 | 21.1 kB | .jpg | 169.686 x 148.519 mm - 481 x 421 px - 72 dpi

Wiring example

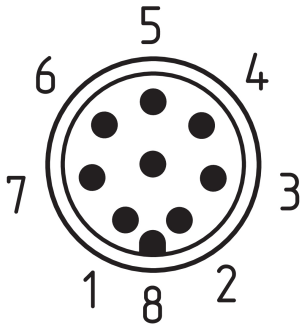


ID: kazm2l26

| 50.3 kB | .cdr |

| 105.6 kB | .jpg | 352.778 x 192.969 mm - 1000 x 547 px - 72 dpi

Contact arrangement



ID: km23-k8b

| 5.3 kB | .png | 73.731 x 79.728 mm - 209 x 226 px - 72 dpi

| 139.8 kB | .jpg | 352.778 x 380.647 mm - 1000 x 1079 px - 72 dpi

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, 42279 Wuppertal

The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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