



AZM 200ST2-T-SD2PA

- Guard locking monitored
- Connector M12, 8-pole
- serial diagnostic output
- 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)	Phased-out product
EAN (European Article Number)	4030661355658
eCl@ss number, Version 9.0	27-27-26-03
eCl@ss number, Version 11.0	27-27-26-03
Available until	31.12.2020

Approval - Standards

Certificates	TÜV cULus EAC
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General data

Standards	IEC 61508 EN 60947-5-1 EN ISO 13849-1
Active principle	inductive
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	490 g
Time to readiness, maximum	4,000 ms
Reaction time, maximum	60 ms
Duration of risk, maximum	120 ms

General data - Features

Power to lock	Yes
Guard locking monitored	Yes
Serial diagnostics	Yes
Manual release	Yes
Short circuit detection	Yes
Short-circuit recognition	Yes
Series-wiring	Yes
Safety functions	Yes
Integral System Diagnostics, status	Yes
Number of safety contacts	2
Number of Series-wiring of sensors	31

Safety appraisal

Standards	IEC 60947-5-3 IEC 61508
Mission Time	20 Year(s)

Safety appraisal - Interlocking

Performance level, up to	e
Control 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)

Mechanical data

Mechanical life, minimum	1,000,000 Operations
Clamping force in accordance with ISO14119 F_{zh}	2,000 N
Clamping force, maximum F_{max}	2,600 N
Latching force	30 N
Actuating speed, maximum	0.2 m/s

Mechanical data - Connection technique

Terminal Connector	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 to EN 60529
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+50 °C

Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+85 °C
Relative humidity, minimum	30 %
Relative humidity, maximum	95 %
Note (Relative humidity)	non-condensing
Resistance to vibrations to EN 60068-2-6	10 ... 55 Hz, amplitude 1 mm
Resistance to shock	30 g / 11 ms
Protection rating	II

Ambient conditions - Insulation value

Rated insulation voltage U_i	32 VDC
Rated impulse withstand voltage U_{imp}	0.8 kV
Overvoltage category	III
Degree of pollution to VDE 0100	3

Electrical data

Operating voltage, minimum	20.4 VDC
Operating voltage, maximum	26.4 VDC
No-load supply current I_0	600 mA
Operating current	1,200 mA
Switching frequency, approx.	1 Hz

Electrical data - Solenoid control

Switching thresholds	-3 V ... 5 V (Low) 15 V ... 30 V (High)
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Electrical data - Fail-safe digital inputs

Switching thresholds	–3 V ... 5 V (Low) 15 V ... 30 V (High)
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Electrical data - Fail-safe digital outputs

Rated operating current (safety outputs)	250 mA
Voltage drop U_d , maximum	4 V
Current leakage I_r	0.5 mA
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.25 A

Electrical data - Diagnostic output

Voltage drop U_d , maximum	4 V
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.05 A

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 serial diagnostic output
PIN 6	X2 Safety input 2

PIN 7	Y2 Safety output 2
PIN 8	IN serial diagnostic input

Scope of delivery

Included in delivery	Actuators must be ordered separately. Triangular key for AZM 200
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Accessory

Recommendation (actuator)	AZ/AZM 200-B1
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Notes

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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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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