



AZM 161Z-ST1-FB-RT

- Device version for connection to a Safety-Field-Box SFB
- connector plug M12, 8-pole
- Thermoplastic enclosure
- Double-insulated
- Interlock with protection against incorrect locking.
- 130 mm x 90 mm x 30 mm
- 6 Contacts
- Long life

Data

Ordering data

Product type description	AZM 161Z-ST1-FB-RT
Article number (order number)	103034787
EAN (European Article Number)	4030661541761
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
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General data

Standards	EN ISO 13849-1 EN ISO 14119 EN IEC 60947-5-1
Coding level according to EN ISO 14119	Low
Working principle	electromechanical
Housing material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Gross weight	467 g

General data - Features

Power to unlock	Yes
Emergency exit	Yes
Number of actuating directions	3
Number of auxiliary contacts	1
Number of safety contacts	2

Safety classification

Standards	EN ISO 13849-1
Performance Level, up to	c
Category	1
B _{10D} Normally-closed contact (NC)	2,000,000 Operations
Note	Electrical life on request.
B _{10D} Normally-open contact (NO)	1,000,000 Operations
Note	at 10% I _e and ohmic load
Mission time	20 Year(s)

Safety classification - Fault exclusion

Please note:	Can be used when fault exclusion for dangerous damage to the 1-channel mechanism is permissible and sufficient protection against manipulation is guaranteed.
Performance Level, up to	d

Category	3
Note	for 2-channel use and with suitable logic unit.
Mission time	20 Year(s)

Safety classification - Guard locking function

Performance Level, up to	d
Category	2
PFH value	3.01×10^{-7} /h
Note (Performance Level)	Information for the safety classification of the guard locking function is documented in the "Operating instructions" or in the "Operation and mounting" instructions.

Mechanical data

Mechanical life, minimum	1,000,000 Operations
Actuating play in direction of actuation	5.5 mm
Holding force F_{Zh} in accordance with EN ISO 14119	2,000 N
Holding force F_{max} , maximum	2,600 N
Latching force	30 N
Positive break travel	10 mm
Positive break force per NC contact, minimum	10 N
Positive break force, minimum	20 N
Actuating speed, maximum	2 m/s
Mounting	Screws
Type of the fixing screws	3x M6

Mechanical data - Connection technique

Connector position	Centre
Termination	Connector plug M12, 8-pole, (A-coding)

Mechanical data - Dimensions

Length of sensor	30 mm
Width of sensor	130 mm
Height of sensor	90 mm

Ambient conditions

Degree of protection	IP67
Ambient temperature	-25 ... +60 °C
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+85 °C
Note (Relative humidity)	non-condensing non-icing
Protection class	II
Permissible installation altitude above sea level, maximum	2,000 m

Ambient conditions - Insulation values

Rated insulation voltage U_i	Connector, 8 poles - 60 V
Rated impulse withstand voltage U_{imp}	0.8 kV
Rated impulse withstand voltage, connector 8-pole	0.8 kV

Electrical data

Thermal test current	2 A
Rated control voltage	24 VAC/DC
Required rated short-circuit current	1,000 A
Electrical power consumption, maximum	10 W
Switching element	NO contact, NC contact

Switching principle	slow action, positive break NC contact
Switching frequency	1,000 /h
Material of the contacts, electrical	Silver

Electrical data - Magnet control

Magnet switch-on time	100 %
Test pulse duration, maximum	5 ms
Test pulse interval, minimum	50 ms

Electrical data - Safety contacts

Voltage, Utilisation category AC- 15	24 VAC
Current, Utilisation category AC- 15	2 A
Voltage, Utilisation category DC- 13	24 VDC
Current, Utilisation category DC- 13	2 A

Electrical data - Auxiliary contacts

Voltage, Utilisation category AC- 15	24 VAC
Current, Utilisation category AC- 15	2 A
Voltage, Utilisation category DC- 13	24 VDC
Current, Utilisation category DC- 13	2 A

Other data

Note (applications)	sliding safety guard removable guard hinged safety guard
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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	Signalling 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.
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Note

Note (Emergency exit)	For cases of danger Actuation from within the hazardous area
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Ordering code

Product type description:
AZM161 (1)-(2)-FB-(3)(4)(5)

(1)	
Z	Solenoid interlock monitored  (Not in power to lock version)
B	Actuator monitored
(2)	
ST1	connector plug M12, centre
ST2	connector plug M12, right
(3)	

	Latching force 5 N
R	Latching force 30 N
(4)	
	Power to unlock
A	Power to lock
(5)	
	Manual release
N	Emergency release
T	Emergency exit
TD	Emergency exit on the cover side
TU	Emergency exit on the cover side

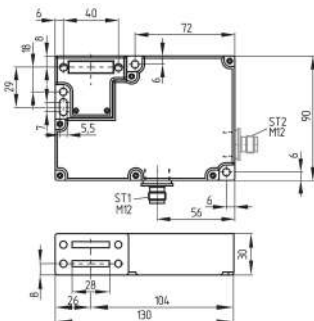
Pictures

Product picture (catalogue individual photo)



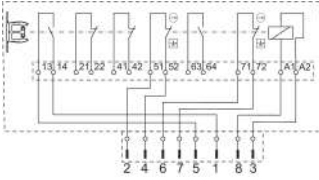
ID: kazm1f72
 | 269.2 kB | .jpg | 352.778 x 262.819 mm - 1000 x 745 px - 72 dpi
 | 27.0 kB | .png | 74.083 x 55.033 mm - 210 x 156 px - 72 dpi
 | 39.5 kB | .jpg | 123.472 x 92.075 mm - 350 x 261 px - 72 dpi

Dimensional drawing basic component



ID: 1azm1g27
 | 11.8 kB | .png | 73.731 x 74.436 mm - 209 x 211 px - 72 dpi
 | 155.5 kB | .jpg | 352.778 x 355.953 mm - 1000 x 1009 px - 72 dpi

Diagram

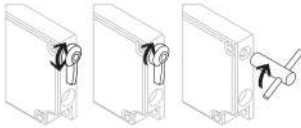


ID: kazm1k123

| 120.8 kB | .jpg | 352.778 x 192.264 mm - 1000 x 545 px - 72 dpi

| 4.6 kB | .png | 74.083 x 40.217 mm - 210 x 114 px - 72 dpi

Operating principle



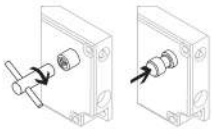
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| 32.7 kB | .cdr |

| 107.3 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

| 12.5 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

Operating principle



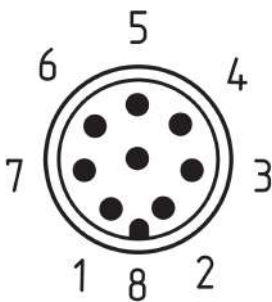
ID: 1azm1a53

| 32.1 kB | .cdr |

| 84.1 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

| 9.9 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

Contact arrangement

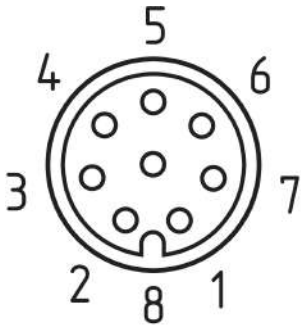


ID: km12-k8b

| 5.3 kB | .png | 73.731 x 87.489 mm - 209 x 248 px - 72 dpi

| 138.6 kB | .jpg | 352.425 x 417.689 mm - 999 x 1184 px - 72 dpi

Contact arrangement



ID: km23-k8a

| 18.0 kB | .cdr |

| 5.5 kB | .png | 73.731 x 79.728 mm - 209 x 226 px - 72 dpi

| 155.6 kB | .jpg | 352.778 x 380.647 mm - 1000 x 1079 px - 72 dpi

Schmersal India Pvt. Ltd., Plot No - G-7/1, Ranjangaon MIDC, Tal. - Shirur, Dist.- Pune 412 220

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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