



AZM 170B-ST-FB-ZRA

- Device version for connection to a Safety-Field-Box SFB
- connector plug M12, 8-pole
- Thermoplastic enclosure
- Double-insulated
- Compact design
- Interlock with protection against incorrect locking.
- Long life
- High holding force
- 90 mm x 84 mm x 30 mm

Data

Ordering data

Product type description	AZM 170B-ST-FB-ZRA
Article number (order number)	103038468
EAN (European Article Number)	4030661546544
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

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	333 g

General data - Features

Power to lock	Yes
Number of actuating directions	2
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)

Mechanical data

Mechanical life, minimum	1,000,000 Operations
Holding force F_{Zh} in accordance with EN ISO 14119	1,000 N
Holding force $F_{max'}$ maximum	1,300 N
Latching force	5 N
Positive break travel	11 mm
Positive break force per NC contact, minimum	8.5 N
Positive break force, minimum	8.5 N
Actuating speed, maximum	2 m/s
Mounting	Screws
Type of the fixing screws	2x M5
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

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

Mechanical data - Dimensions

Length of sensor	30 mm
Width of sensor	90 mm
Height of sensor	92.5 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
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
Overtoltage category	III
Degree of pollution	3
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	12 W
Switching element	NO contact, NC contact
Note (Switching element)	Change-over contact with double break, type Zb or 2 NC contacts, with galvanically separated contact bridges
Switching principle	slow action, positive break NC contact
Switching frequency	1,000 /h

Material of the contacts, Silver
electrical

Electrical data - Magnet control

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

Electrical data - Safety contacts

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

Electrical data - Auxiliary contacts

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

Other data

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

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 (General)	Interlocks with the power to lock principle may only be used in special cases after a thorough evaluation of the accident risk, since the guarding device can immediately be opened on failure of the electrical power supply or when the main switch is opened.
Note (Manual release)	right For manual release using M5 triangular key, available as accessory

Ordering code

Product type description:

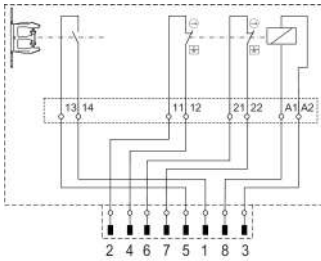
AZM 170(1)-ST-FB-(2)(3)(4)

(1)

Z	Solenoid interlock monitored ^{Ex} (Not in power to lock version)
B	Actuator monitored

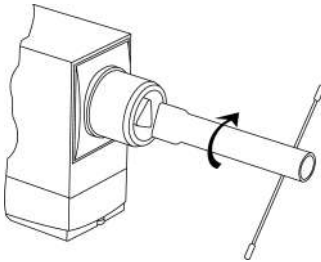
(2)

	Latching force 5 N
R	Latching force 30 N



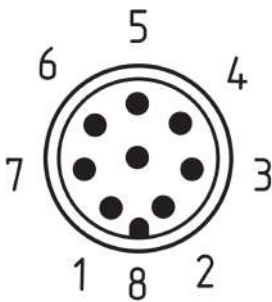
ID: kazm170fb-rs
 | 125.4 kB | .jpg | 352.778 x 281.517 mm - 1000 x 798 px - 72 dpi
 | 8.5 kB | .png | 74.083 x 59.267 mm - 210 x 168 px - 72 dpi

Operating principle



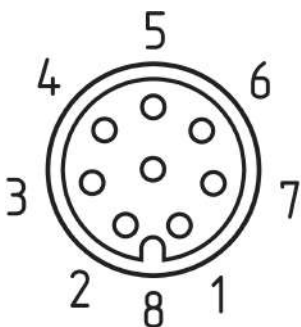
ID: kazm1a71
 | 113.1 kB | .jpg | 352.778 x 280.811 mm - 1000 x 796 px - 72 dpi
 | 4.6 kB | .png | 74.083 x 58.914 mm - 210 x 167 px - 72 dpi

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