



AZM 170ST-12/02ZK-2197 24VAC/DC

- Manual release from side
- connector, can be rotated
- Thermoplastic enclosure
- Double-insulated
- Compact design
- 90 mm x 84 mm x 30 mm
- Interlock with protection against incorrect locking.
- Long life
- High holding force

Data

Ordering data

Product type description	AZM 170ST-12/02ZK-2197 24VAC/DC
Article number (order number)	101186191
EAN (European Article Number)	4030661333403
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	BG
	cULus
	CCC

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
Enclosure material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Material of the contacts, electrical	Silver
Gross weight	307 g

General data - Features

Power to unlock	Yes
Manual release	Yes
Number of actuating directions	2
Number of auxiliary contacts	1
Number of safety contacts	4

Safety classification

Standards	EN ISO 13849-1
Mission time	20 Year(s)

Safety classification - Safety outputs

B _{10D} Normally-closed contact (NC)	2,000,000 Operations
Note (B _{10D} Normally open contact (NO))	at 10% I _e and ohmic load

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	17 N
Actuating speed, maximum	2 m/s

Mechanical data - Connection technique

Termination	Connector plug M12, 4-pole, (A-coding) Connector plug M12, 8-pole, (A-coding)
-------------	--

Mechanical data - Dimensions

Length of sensor	30 mm
Width of sensor	108 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

Ambient conditions - Insulation values

Rated insulation voltage U_i	60 V
Rated impulse withstand voltage U_{imp}	0.8 kV
Overvoltage category	III
Degree of pollution	3

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

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

Current, Utilisation category AC-15	4 A
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	2 A

Electrical data - Auxiliary contacts

Current, Utilisation category AC-15	4 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
---------------------	--

Scope of delivery

Scope of delivery	Actuators must be ordered separately.
-------------------	---------------------------------------

Note

Note (Manual release)	right For manual release using M5 triangular key, available as accessory Additional manual release on side
-----------------------	--

Ordering code

Product type description:
AZM 170(1)-(2)Z(3)K(4)-(5)-(6)-(7)-(8)

(1)

without	IDC method of termination
SK	Screw connection

(2)

11	1 NO contacts/1 NC contact
02	2 NC contact

(3)

without

Latching force 5 N

R

Latching force 30 N

(4)

without

Power to unlock

A

Power to lock

(5)

without

Cable entry M20

ST

2 Stecker M12, 4-polig

ST-2431

As well as ST; individual solenoid monitoring

ST8

Connector M12 8-pole

(6)

24VAC/DC

Us 24 VAC/DC

110VAC

Us 110 VAC

230VAC

Us 230 VAC

(7)

1637

Gold-plated contacts

(8)

without

Manual release

2197

Manual release from side (Standard in case of conector and power to unlock versions)

Pictures

Product picture (catalogue individual photo)

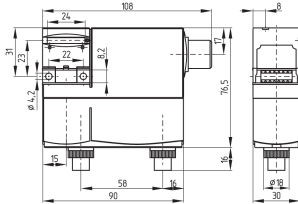


ID: sazm1f52

| 241.1 kB | .jpg | 287.161 x 234.597 mm - 814 x 665 px - 72 dpi

| 28.0 kB | .png | 74.083 x 60.678 mm - 210 x 172 px - 72 dpi

Dimensional drawing basic component



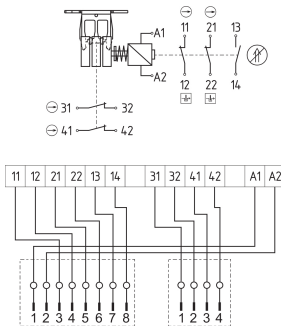
ID: lazm1g21

| 47.6 kB | .cdr |

| 9.8 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 124.4 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

Diagram



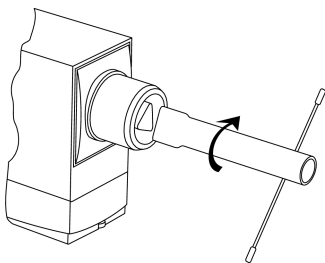
ID: kazm1k74

| 121.2 kB | .ai | 210.002 x 297 mm - 595 x 841 px - 72 dpi

| 176.9 kB | .jpg | 352.425 x 404.989 mm - 999 x 1148 px - 72 dpi

| 6.4 kB | .png | 74.083 x 85.019 mm - 210 x 241 px - 72 dpi

Operating principle

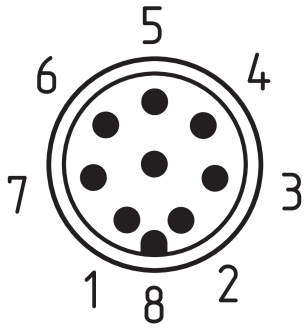


ID: kazm1a71

| 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

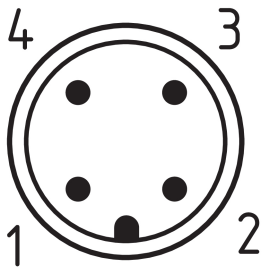


ID: km23-k8b

| 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

Contact arrangement



ID: km12-k4c

| 4.2 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

| 113.3 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 px - 72 dpi

Schmersal, Inc., 15 Skyline Drive, Hawthorne, NY 10532

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.

Generated on: 2/17/2023, 10:01 AM