

TECH BRIEF:

AZM40 ELECTRONIC SOLENOID INTERLOCK



The smallest electronic solenoid interlock available

The AZM40 is a safety rated solenoid interlock with an integrated radio frequency identification (RFID) based electronic safety sensor.

The AZM40 Series is designed for machine/work cells where access to a hazardous work area must be controlled until safe conditions exist. The solenoid lock provides 2000 N to secure the machine guard until dangerous conditions, which may exist immediately after removal of power, have abated. The solenoid lock may be controlled by a time delay, motion detector, position sensor or other suitable component.

The housing is amazingly compact: 40 x 119 x 20 mm. The mounting holes are placed centrally in the housing, to match the channel in typical extruded profiles used in guard doors. We offer two types of finishes for the screw bore holes: countersunk or flat. The countersunk holes are tapered at 45° and allow for the screws to rest flush with the housing. The flat finish (PH) allows the flat headed screws to protrude.

The AZM40 works on the bistable principle: In the event of a power cut, it retains the current position. This ensures safe operation, whatever the status of the machine. Even if there are hazardous run-on movements, the safety door remains safely locked in the event of a power failure. Another advantage of the bistable principle is the consistently low energy consumption, as the solenoid only requires power when the door is to be unlocked.

For applications with personnel protection (interlock monitored), the safety outputs are switched on when the safety door is closed and the interlock locked. The AZM40B model (actuator monitored) can be used for applications with process protection. In this variant, the safety outputs are actuated as soon as the safety door is closed. With this device, locking the interlock is not absolutely necessary.

The switch is designed for use in industrial applications. IP ratings are:
 IP66 - dust tight and withstands powerful water jets
 IP67 - withstands temporary submersion in water up to 1 meter, 30 minutes.
 IP69 - Withstands high-pressure high-temperature washdown

The AZM40 series is compliant with North American and International standards such as cULus and CE. It's two-channel input signal meets PLe/Category4 (ISO 13849) or SIL3 (IEC 61508) for both its interlock and guard locking function. It is a Type 4 interlock per ISO 14119, with a high coding level with the individual coding option (I1 or I2).

The AZM40 solenoid interlock can be integrated into a slim, modern door system with the new BDF40 control panel and new DHS door handle, thanks to a few accessories and connecting parts.

Features

- Bi-Stable solenoid: retains last locked position
- RFID based sensor, Coding "high" to ISO 14119
- LED Status indicators, visible from 3 sides
- Actuator approach from 180°
- Symmetrical housing - face left or right
- Lockout/tagout device available
- Emergency exit / emergency release
- Sized to fit common extruded profiles used in machine guard doors.
- IP69 Rated for washdown applications



ORDERING DETAILS

AZM40①-②-ST-1P2P-③

- ① Monitoring
 Z Guard locking monitored
 B Actuator monitored
- ② Actuator coding
 blank Standard version (no coding)
 I1 Individual coding (single)
 I2 Individual coding (repeatable)
- ③ Mounting screw bores
 blank Countersunk (pictured)
 PH Flat

ACTUATORS (ordered separately)

- AZM40-B1 countersunk mounting
 AZM40-B1-PH flat mounting

ACCESSORIES

- SZ40 Lockout tagout device
 MP-AZM40 Mounting plate

- Emergency exit (T)
 ACC-AZM40-LEV-T Lever
 ACC-AZM40-PT-T-40MM pushbutton
 ACC-AZM40-PT-T-170MM pushbutton

- Emergency release (N)
 ACC-AZM40-LEV-N Lever
 ACC-AZM40-PT-N-40MM pushbutton
 ACC-AZM40-PT-N-170MM pushbutton

Cables: M12, 8 Pole

- 103007358 5 meter
 103007359 10 meter
 103011414 15 meter
 101207728 KA-0904
 101207729 KA-0905
 101207730 KA-0908

Controllers:

- SRB-E-201LC SRB-E-322ST
 SRB-E-201ST SRB-E-402ST
 SRB-E-301ST SRB-301MC
 SRB-E-212ST SRB-E-204ST
 SRB-E-402FWS-TS SRB-E-204PE

Accessories

LOTO device

- for up to 6 locks, with retention chain and holder



Emergency exit / Emergency release

- two styles: lever arm or pushbutton

Mounting plates

- Universal mounting plate for various profile systems sizes



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