

# AZM200 Solenoid Interlock with Door Handle Actuator



## Overview

The AZM200 is a combination of solenoid interlock and electronic safety sensor with a door handle actuator.

The AZM200 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 506 pounds of force 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.

One unique design feature of the AZM200 is the door handle actuator. When the guard is opened, the actuator is retracted into the handle housing, protecting the actuator and the operator against damage and injury.

The door handle actuator is available with an optional inside emergency release which meets ANSI/RIA R15.06 requirements. This one hand operated handle mechanically overrides the solenoid lock from inside the hazardous area, allowing operators to leave quickly and safely - even during a power failure.

The AZM200 also features an integrated electronic safety sensor to detect guard door closure independently of the solenoid lock. This sensor uses our patented pulse echo technology, a non-contact operating principle that limits wear on components, and tolerates misalignment. A microprocessor provides continuous internal function tests and monitors the safety outputs, meeting PLe to ISO13849-1 and SIL 3 to IEC61508, even when using one switch per guard or wiring them in series.

Three color LEDs on the sensor indicate status, various errors, and misalignment. For more advanced indication the AZM200 is also available with serial diagnostics to connect to commercial field bus systems.

The slim housing of the switch was designed to match the aluminum profiles used in many machine guard doors.

The AZM200 series are cULus and CE approved to meet stringent North American and European Standards.

## Features



- Door handle actuator options
1. Standard handle (G1)
  2. Rotary knob (G2)



- Optional inside emergency releases
1. Standard handle (P1)
  2. Inset rotary (P25)
  3. Heavy duty metal assembly (P20)



Optional integrated lockout device on door handle is one of three methods for lockout. Actuator retracts into door handle housing when opened (handle is horizontal)

## Solenoid controls

The BDF200 series control stations are designed to offer various machine or process controls conveniently located at the guard door in a housing that matches the AZM200. Each BDF200 control station can include operators in up to 4 positions which can be configured to user-defined application needs, including a readily accessible integrated Emergency Stop palm button meeting RIA 15.06 requirements.



## Applications

- Robot cells
- Food processing machinery
- Pharmaceutical machinery
- Medical applications
- Material handling systems
- Packaging machinery
- Chemical processing equipment
- Folding or brake presses
- Filter presses
- Punching machines
- Printing machines
- Injection molding
- Palletizers
- Packaging equipment

## Available Literature



GK-1 Safety Products Catalog  
AZM200: pages 1-54 thru 1-59

## Ordering Details

### Solenoid switch/sensor

#### AZM200①②-T-③④

- ① Monitoring
 

<i>blank</i>	Guard locking monitored
B	Actuator monitored
- ② Connection
 

SK	Screw terminals
CC	Cage clamps
ST1	M23, 9 pole connector
ST2	M12, 8 pole connector
- ③ Outputs
 

1P2P	Diagnostic output
1P2PW	Closed & locked output
SD2P	Serial Diagnostic
- ④ Locking
 

<i>Blank</i>	Power to unlock
A	Power to lock

### Door handle actuator

#### AZ/AZM200-B30-①TA②③-④

- ① Direction
 

L	Left hinged door
R	Right hinged door
- ② Handle Types (outside)
 

G1	Handle
G2	Rotating knob
- ③ Emergency Exit (inside)
 

<i>blank</i>	Without
P1	Red Door handle
P20	Red metal handle
P25	Inset rotary knob
P30	3 point locking bar
P31	3 point with exit handle
- ④ Integrated Lockout Device
 

<i>Blank</i>	Without
SZ	With lockout (3 lock)

### Accessories

- |                  |                |
|------------------|----------------|
| <b>SZ200</b>     | Lockout device |
| <b>SZ200-1</b>   | Lockout device |
| MP-AZ/AZM200     | Mounting plate |
| MP-AZ/AZM200-B30 | Mounting plate |
| MP-AZ/AZM200-P1  | Mounting plate |

### Compatible Safety Controllers

- |                    |                    |
|--------------------|--------------------|
| <b>SRB-E-201LC</b> | <b>SRB-E-322ST</b> |
| <b>SRB-E-201ST</b> | <b>SRB-E-402ST</b> |
| <b>SRB-E-301ST</b> | <b>SRB-301MC</b>   |
| <b>SRB-E-212ST</b> |                    |

*Bold part numbers are regularly stocked*

## Contact

**Schmersal USA**  
15 Skyline Drive  
Hawthorne, NY 10532

Tel: 914-347-4775  
Fax: 914-347-1567  
E-mail: salesusa@schmersal.com

**Schmersal Canada**  
15 Regan Road, Unit # 3  
Brampton, ON L7A 1E3

Tel: 905-495-7540  
Fax: 905-495-7543  
E-Mail: salescanada@schmersal.com



3 color LEDs for signaling:  
Green = Power;  
Yellow = Status  
Red = (Flashing) Diagnostic error