## **TECH BRIEF:**

# ELECTROMECHANICAL AND SOLENOID LOCKING DEVICES

The electromechanical safety switches with separate actuator (AZ) as well as the electromechanical solenoid interlocks (AZM) are designed for use with movable guards which must be closed for operator safety. The AZ and AZM devices are used in all areas of production and in almost all types of machine tools. The design offers advantages particularly where routine access to the hazard area is necessary for purposes of machine actuation, fault clearance or set-up.

The AZM solenoid interlocks have been designed to prevent sliding, hinged and removable safety guards from being opened before hazardous conditions (e.g. run-on movements from rollers, chains, shafts etc.) have been eliminated. Redundant mechanically linked Positive-Break contacts of the AZ and AZM allows these devices to be used in even the highest safety classifications as called out by ISO 13849 and IEC 61508. The AZi and AZMi variants also offer unique actuator coding to fulfill High level coding requirements per ISO 14119.

### KEYED INTERLOCKS



### **AZ 17**

- Small body profile
- 2 contacts
- IDC, Pre-wired or M12 connector
- B25 door handle actuator option
- Option for individual coding



### **AZ 16**

- 4 actuating plane options
- Up to 3 contacts
- Screw terminals or M12 connector
- STS door handle actuator option
- Option for individual coding



### AZ 3350

- Metal housing
- 3 contacts
- Rotatable head
- STS door handle actuator option



### **AZ 415**

- Robust die-cast aluminum housing
- Adjustable holding up to 400N
- Up to 6 contacts
- Options for dual door monitoring
- STS door handle actuator option

### SOLENOID LOCKING INTERLOCKS



### **AZM 170**

- Compact profile
- 1000 N locking force
- Up to 4 contacts
- IDC or M12 connector
- B25 door handle actuator option
- Option for individual coding



### **AZM 161**

- 4 actuating plane options
- 2000 N locking force
- 6 contacts
- Screw terminals or M12 connector
- STS door handle actuator option
- Option for individual coding



### **AZM 150**

- Slim profile
- 1500 N locking force
- 3 contacts
- Rotatable head
- Option for individual coding



### **AZM 415**

- Robust die-cast aluminum housing
- 3500 N locking force
- Adjustable holding up to 400N
- Up to 6 contacts
- Options for dual door monitoring
- STS door handle actuator option

### Common accessories



TFA/TFI door alignment aids and door stops



Pilot light kits for status signaling, placed in unused conduit openings



lockout tag for AZ16, AZ3350, AZM161, and AZM150





Individually coded options to meet High Level coding to ISO 14119



STS30 door handle assembly with integrated actuator for the AZ16, AZ3350, AZ415, AZM161, or AZM415

### SCHMERSAL USA

