

THE

# GATEKEEPER

Man-Machine Safeguarding News

January 2016

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## Literature



### ISO 14119 Guide

This guide overviews the standard for the design and selection of switches used to monitor moveable safety guards of machinery and plants. The standard distinguishes four different types of interlock switches based on mechanical or non-contact operating principles and the coding of actuator elements. 24 pages.

[Order a complimentary copy](#)

## Reference



### Industry Solutions

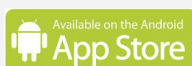
Brochures highlighting the safety devices specifically designed to meet the special challenges of the packaging, food, wood processing, machine tool, elevators, and heavy industries.

[View the PDFs here](#)



### Appication Finder

Our Application Finder is a helpful tool for users to select suitable switchgear for variety of machine safeguarding applications. It is now available for iPad and Android tablets. Download the free app here:



[Or view on the web](#)

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## New Year, New Innovations

After last year's celebrations of 70 years in safety Schmersal shows no signs of slowing down as we kick off 2016 with brand new innovations. Scheduled to launch throughout the year is the bolt locking AZM 400, the versatile safety controller series SRB-E and the modular programmable safety controller PSC1. Maintaining our original vision of protection for man and machine our product portfolio continues to expand, representing our growth as the leader in design and manufacturing of machine safeguarding products.

### AZM400



The AZM400 enhances the Schmersal family of safety locking devices to include a safety solenoid interlock with bolt locking. This consists of a bistable locking unit with non-contact RFID sensor technology and a motor driven locking bolt. Once engaged the AZM400 boasts a massive holding force of 10,000N and a high tolerance for misalignment with +/- 4mm with a bolt penetration of 1mm to 7mm into the actuator. Also featured are the detailed diagnostics LEDs, two-channel input signals for PLe/SIL3 of both the interlocking and guard locking functions and individual coding of TYPE 4 per ISO 14119.

**Available in February 2016**

### SRB-E



The PROTECT line is expanded with the addition of the SRB-E series. This series will consists of 8 different modules which can all be configured for up to eleven different applications simply by configuring a tamper resistant rotary dial. All models and outputs (whether relay or semiconductor) will fulfill PLe per ISO 13849 and SIL3 per IEC 61508. Some featured models include monitoring of 2 discrete safety functions, configurable time delayed outputs and monitoring of 4 separate input devices where the SRB-E can then be cascaded.

**Look for the official launch in the coming months.**

### PSC 1



The safety control system PSC1 is a modular and freely programmable compact safety controller with I/O extension modules for signal processing of emergency stop switches, guard door switches, light grids and additional mechanical and electronic safety switchgear. Additionally, there is the possibility via numerous functions to monitor up to 12 axes for safe speed. Using the universal communications interface a connection can be established to all the standard field bus systems. Also featured is safe cross communication over Ethernet SMMC, safe remote I/O and modular expansion to 272 I/Os.

**Look for the official launch in the coming months.**

## Safety Webinar

### Lock Out / Tag Out or Machine Guarding



This past December, our Engineering Services Manager Mike DeRosier presented a one hour webinar on the differences between the two methods. During the session he discusses when to use LO/TO on some tasks and machine guarding on other tasks. The webinar is available to view on demand. 1 hour.

[Go to the webinar](#)

View other webinars and safety training videos on our website:  
[www.schmersalusa.com](http://www.schmersalusa.com)



## Ask The Expert

**Devin Murray**  
 TUV Functional Safety Engineer  
 ID-No. 4274/11

**Q: What is the difference between guard locking and process locking?**

**A:** Guard locking is used to protect personnel from a machine hazard, until a safe condition exists. The safety function must insure that the guard is both "closed" and "locked". For guard locking devices both the interlock function and the locking function of the switch must be monitored as part of the safety function.

Process locking is used to prevent interruption of a machine process or cycle. Interrupting a machine process mid-cycle can lead to product loss, material waste, tooling or machine damage, or extensive downtime (productivity loss) while trying to reset the process. For process locking devices, only the monitoring of the interlock function (door closed) is required to meet the requirements for safety.

More information can be found within [ISO 14119](#)