The GATEKEEPER

Man - Machine Safeguarding News from SCHMERSAL

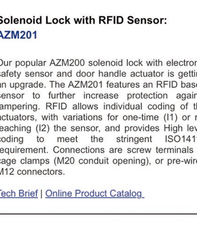
January 2019

New Year, New Innovations

Machine safety is a complex topic. Companies are increasingly calling on qualified safety specialists for their specific know-how to guide them in making the appropriate decisions for their safety needs. For Schmersal, machine safety is part of our DNA: Over 70 years of technical knowledge and industry experience allows us to combine the building blocks of safety-rated components with control systems and software for customized and comprehensive safety systems.
As safety requirements have changed over the years, Schmersal products have evolved as well. Being a world leader in machine safety is an ongoing mission, and at Schmersal we take pride in being able to develop new ideas into proven technology to stay ahead of the innovation curve and to meet the changes in industry applications for machine safeguarding. From electro-mechanical safety switches to programmable safety controllers, for decades our innovations have led the way in man-machine safety.

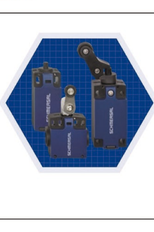
Here are some of the latest innovations that will be available in the coming year:

Safety Light Curtain With Wash Down Protection: SLC/SLG 440 IP69K



The SLC440 Safety Light Curtains now offer an IP69K enclosure option: The high strength Polycarbonate housing and stainless steel end caps provide not only high resistance to frequent cleaning with water, alkali solutions, foam, hot steam or high-pressure jets typical of hygienic applications but also additional protection against possible mechanical damage in the field. The transparent housing enhances the ruggedness of the rectangular closed profile of the light curtain and still allows all the integrated functions, such as double reset or floating blanking with movable edge, and visible signaling from the end cap and 7 segment display.

View an introduction video (YouTube)



Solenoid Lock with RFID Sensor: AZM201

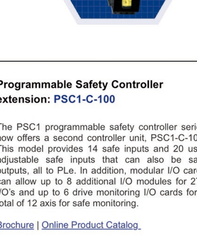
Our popular AZM200 solenoid lock with electronic safety sensor and door handle actuator is getting an upgrade. The AZM201 features an RFID based sensor to further increase protection against tampering. RFID allows individual coding of the actuators, with variations for one-time (I1) or re-teaching (I2) the sensor, and provides High level coding to meet the stringent ISO14119 requirement. Connections are screw terminals or cage clamps (M20 conduit opening), or pre-wired M12 connectors.

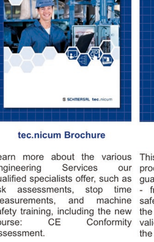
Tech Brief | Online Product Catalog

PROFINET/PROFIsafe Safety Fieldbus: SFB

The SFB is a safety field box for PROFINET / PROFIsafe systems. It allows for simple plug-and-play installation, via M12-8 pole connectors, for up to eight safety devices. These include electronic and electro-mechanical interlocks, switches, sensors, light curtains, and other safety components. The safe signals from connected devices are forwarded to a safety controller for evaluation via the secure PROFINET/PROFIsafe field bus interface.

Brochure





Safety Limit Switches: PS2xx and PS3xx

The modular design of our PS116 limit switch has been extended to provide a new look and new features to our 235, 236, 336 and 336 series of safety rated limit switches. The PS2xx and PS3xx series feature metal and plastic versions in the conventional industry profile sizes, a variety of fully adjustable and interchangeable actuation levers, up to 3 contacts, and the option for screw terminals with M20 conduit opening or pre-wired M12 connectors.

Brochure | Online Product Catalog

Standstill Monitors: SRB-E-...FWS

Two new SRB-E electronic safety controller models will be available for standstill monitoring functions. SRB-E-302FWS-TS offers safe standstill monitoring (adjusted from 0.5 Hz to 10 Hz) or safety time relay (adjusted from 0.5s and 3000s,) in a single component. SRB-E-402FWS-TS offers the additional means of monitoring a solenoid interlock through two channels, with or without short-circuit recognition.

Brochure | Online Product Catalog

Programmable Safety Controller extension: PSC1-C-100

The PSC1 programmable safety controller series now offers a second controller unit, PSC1-C-100. This model provides 14 safe inputs and 20 user adjustable safe inputs that can also be safe outputs, all to PLe. In addition, modular I/O cards can allow up to 8 additional I/O modules for 272 I/O's and up to 6 drive monitoring I/O cards for a total of 12 axis for safe monitoring.

Brochure | Online Product Catalog

Reference

tec.nicum Brochure

Learn more about the various Engineering Services our qualified specialists offer, such as risk assessments, stop time measurements, and machine safety training, including the new course: CE Conformity Assessment.

Download the brochure

ISO14119 Guide

This guide walks through the process of designing safety guards to the ISO 14119 standard - from initial risk assessment, safety circuit design, choosing the right safety devices, to validation and documentation of the system.

Download the Guide

Food Safety Modernization

The Food Safety Modernization Act legislation demands stricter proactive measures to prevent hazards that could affect food within that facility. One of those measures deals with the hygienic designs of the equipment and controls.

Download the article

Webinar

Safeguarding On Robots And Robot Cells

From the traditional robot to modern technology with collaborative robots, do you know what some of the basic criteria is for safeguarding designs? More and more robots are being introduced and utilized for industrial automation. There are many advantages to Robot Integration, but also comes with challenges on having people effectively work safer on robots and robot cells. This webinar reviews some of the basic concepts and considerations with robot safeguarding.

Duration: 1 hour
Recording hosted by New Equipment Digest

View the webinar recording

Ask The Expert

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

Q: Why does ISO 14119 state that an unauthorized forced opening of an electromagnetic guard locking device must not allow immediate continuation of the process?

A: Unlike mechanical locking devices, forcefully opening an electromagnetic lock will not damage the unit. To minimize willful bypassing of an electromagnetic lock, ISO 14119 offers several measures that can be implemented to help deter unauthorized forced openings. One measure is requiring the electromagnetic lock to undergo a resetting procedure of no less than 10 minutes to replicate the time needed to repair a mechanical locking device that would have been damaged if forced opened.

Have a question? Ask Devin: dmurray@schmersal.com
