

THE GATEKEEPER

Man-Machine Safeguarding News

January 2018

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Video



Passive Field Box PFB Overview Demo

Devin Murray, Schmersal Application Engineer, gives a general overview of the passive field box PFB, used to connect electronic safety switches in series. YouTube. Duration: 9:03

[View the video](#)

Reference



New SchmersalUSA.Com

We've updated our website to a new look. The website is now responsive to viewing on different devices, rearranging the layout for optimized viewing on smart phones, tablets, and desktop screens.

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SATECH Brochure

Schmersal is proud to partner with SATECH to provide guarding solutions in the US and Canada. This catalog gives an overview of the modular fencing systems available from SATECH, and the corresponding safety switches available from Schmersal.

[Download the PDF here](#)

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Industry 4.0

The structure of a typical industrial manufacturing plant has transformed over the centuries starting with the Industrial Revolution of the early 1780's. Today the plant floor is evolving once again to match the cutting edge technology seen in automation and safety systems. Various groups and agencies from around the world have designated a term or phrase for the current transition, but the overall concepts are linked to achieve the goal of a "smart factory".

The Internet of Things (IoT) is often used to describe the vast amount of interconnecting devices which are able to communicate and exchange data while using the internet as a linking platform. When applied to manufacturing, this data exchange has the ability to maximize output and efficiency with little to no human interaction: from automated checks and confirmations of raw materials, to intricate automated processes including production, quality control, packing, and shipping.

The term Industry 4.0 was first introduced during the Hanover Fair of 2011 in Germany. Industry 4.0 is geared specifically towards manufacturing and, as such, has safety in mind. In order to create what is often called a smart factory, Industry 4.0 essentially relies on an IoT infrastructure to communicate quickly and seamlessly between safe and non-safe automated systems.

We are already seeing the framework of Industry 4.0 take shape as safety devices gain more and more communication capabilities transmitting information over networks. For example, many machine systems already have the ability for remote access for troubleshooting. As we continue to move forward this framework will only expand to incorporate even more information within the data exchanges between machines, cells, processes and factories.

Technical Article:

The Effect of Industry 4.0

Efficiently Increase Production While Improving Safety

We are in the midst of the 4th Industrial Revolution which aims to combine cutting edge technology with rigorous safety requirements. This article discusses the goals of Industry 4.0 and the path taken to arrive at this groundbreaking transformation of the modern industrial factory



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Ask The Expert



Josh Fincher
Mechanical Products Specialist
Schmersal USA

Q: Are there safety standards which specify the color of a hard guard?

A: Color is often used to draw attention as a visual indication of a guard, but there is no requirement to use any specific color in national (ANSI) or international (ISO) machinery safety standards. Color is just one of many potential risk reduction measures that can be used, and the appropriate selection of color and other measures will depend on the risk, the machinery, and the application.



If your application needs operators to see through a guarding fence to observe the machine, the use of a bright color makes it difficult, thus raising the chances that the guard will end up bypassed. Darker colors, such as a black, allow better viewing of the machine. If the mesh is painted yellow, then all you see is the yellow mesh, like in this example pictured.

If you have any questions related this topic, please submit them to jfincher@schmersal.com to be answered.