



E-STOPS

WITH INTEGRATED AS-INTERFACE SAFETY AT WORK

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Better e-stop opens new market opportunities

E-stops with integrated AS-Interface Safety at Work functionality

AS-Interface Safety at Work has reached a level of acceptance in the market place that could not have been predicted a few years back. P+F's offering in SaW has been exceptionally well received. E-stops with integrated SaW functionality will allow us to penetrate even more applications and solidify your position in others.

Today, any type of safety input can be connected quickly and easily to AS-Interface. Field- and enclosure-type safety modules with and without auxiliary-powered outputs have been available for several years. This technology report will look at a new line of safety e-stops and discuss the advantages they offer the user.

E-stops with integrated SaW function. Why?

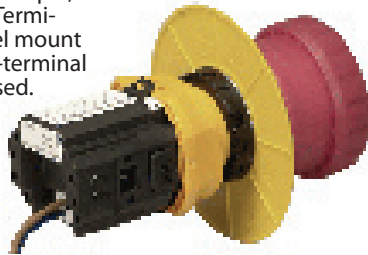
Two answers to this question are obvious: installation simplicity and time. While connecting a traditional e-stop to an AS-Interface SaW module was always much faster than hardwiring it to a traditional safety relay, eliminating the wiring is obviously faster. The new field-mountable F85A e-stop has an M12 connector that, in conjunction with the P+F flat-to-round cable adapters, reduces the installation time of an e-stop to less than one minute. And since no wires are stripped and terminated, we also removed any possibility of incorrectly wiring the e-stop!

Advantage: Fast and error-free installation



Installation times under one minute are achieved reliably using the field-mountable versions of the F85A button. The flat-to-round cable adapter makes this possible.

Panel mounting is simple, fast, and flexible. Terminals on other panel mount modules or flat-to-terminal adapters can be used.



Not all e-stops are mounted in the field.

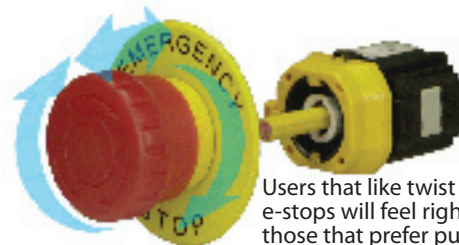
While most e-stops are mounted directly in the field, many control panels and remote call button stations also need e-stop functionality. In these situations, the panel mount version of our AS-Interface intelligent e-stops make the job easy. The included connection cable is easily cut to length. Connection to the AS-Interface network is simple using the P+F flat cable-to-terminal adapter. In situations where other enclosure mount modules are near by, their terminals can be used as well.

Advantage: Since the AS-Interface node is an integral part of the panel mount e-stop only the e-stop needs mounted. Valuable time is saved.

Twist and pull release. Why choose?

Most safety buttons use either a twist or a pull release. Either method is effective as long as users do not have to change their habits. The new P+F safety buttons support both methods. Users will feel right at home and do not have to change the way they operate them.

Advantage: Safety e-stops are more than electronic components. How they operate and release may be just as important. Our new line works the way operators do today!



Users that like twist release safety e-stops will feel right at home. So will those that prefer pull release.

Illumination included ... unless you don't need it.

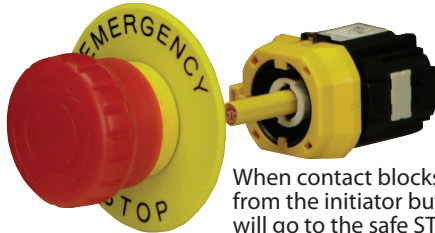
E-stop users fall into two categories: those who need illumination and those who don't. P+F offers both versions—as field- and enclosure-mount versions. And since the button is illuminated by a high intensity LED, auxiliary power is a thing of the past. This reduces the number of leads to be connected in the enclosure (2 leads) and may allow users to operate their AS-Interface system on yellow cable only.

The integrated LED is not activated by the button, but is controlled by the PLC. This flexibility makes it easy to solve even the most unusual applications. In low-light environments it is customary to activate the illumination when the machine is in RUN mode. This enables operators to safely find an e-stop quickly when needed. And once the e-stop has been activated, the flashing illumination indicates which e-stop caused the shutdown.

Advantage: We have the right button for the application. Illumination driven by AS-Interface reduces the number of wires. When cost is the dominant factor, a non-illuminated e-stop offers safe operation at a lower price point.



PLC-controlled illumination gives this e-stop more flexibility. Because the high intensity LED is powered by the yellow AS-Interface flat cable, auxiliary power may not be needed in many cases, reducing installation time and cost even more.



When contact blocks are separated from the initiator button the e-stop will go to the safe STOP state. This makes our button safer than more traditional designs.

Is there a safer than safe operation? We think so.

A traditional e-stop consists of an initiator button, which is typically part of the cover, and a set of safe contacts, which are typically part of the mounting base. This is fine but not ideal. Removing the cover and thus the initiator button will NOT cause the e-stop to indicate a STOP. On the contrary, this type of e-stop will actually indicate RUN when the cover is removed. Unless the safety logic requires some type of reset, this behavior can lead to very dangerous situations.

Our new e-stops go to the safe STOP mode when the contact block is removed from the initiator button. And this is why we feel there is a safer than safe operation.

Advantage: End users can rest assured that the P+F buttons utilize the latest design improvements.

Is it easy to install?

Installation of the IP67 field-mountable button is easy and fast using the P+F flat-to-M12-round cable adapter. And installation of a panel mount version is no harder. Simply attach the two leads of the included connection cable to an available terminal and plug the crimp connector into the base of the e-stop. Addressing the node is also easy and fast using the integrated chinch-connector.

Advantage: Easy and fast connections help to get systems off the assembly floor and out to the end user quickly.

Installation of the panel mount versions is just as simple. The included cable with crimp connector simplifies installations and field service.



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Wide-angle illumination

Illuminated e-stops must be visible. While any LED-based illumination technology favors "head on" viewing, our e-stops offer good visibility even when viewed from the side. Just see for your self.

Advantage: Good visibility leads to faster operator responses and result in higher uptime.

The illumination is visible over a wide angle enabling users to find the e-stop quickly when necessary.



Feature Overview

The all new line of Pepperl+Fuchs safety e-stops with integrated AS-Interface Safety at Work technology allows even faster connection of illuminated and nonilluminated buttons. By integrating the Safety at Work technology right into the buttons, installation time and the possibility for errors is further reduced. Other features include ...

