

# Real beauty is in the system

Eaton's complete line of global modular pushbuttons



*Powering Business Worldwide*



# Sleek look. Countless details.

A premium design and state-of-the-art 30-mm operator—the new M30 elements of the Global Modular family are not just sophisticated, but also robust and functional. The M30 AFX mounting system makes installation easy and reliable.



## Stylish machine designs

Pilot devices with a sleek design are a reflection of the quality behind the systems and machines they are installed in. They are a key component of a machine's overall appearance. The new metallic design is a perfect match for today's innovative machine designs. The flat construction not only makes them easy to clean, but also ensures that they are highly resistant to wear and vandalism.

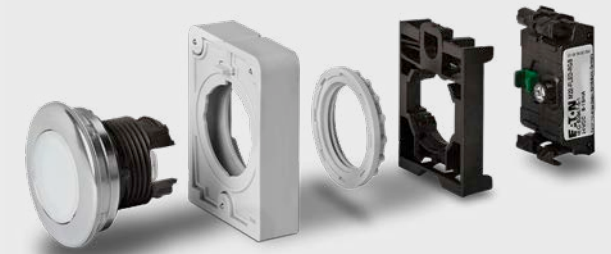
The innovative M30 flat operators can be combined with existing M22 (Global Modular series) contact blocks and lights, providing flexibility when it comes to machine design.

M30 flat operators feature the highest degree of protection up to IP69K and international approvals.

At 30 mm, the M30 flat operators are the perfect match for modern machine designs.

## Portfolio

- Illuminated pushbutton
- Indicator light
- Key operated button
- Selector switch actuators
- Joystick and USB variants
- Potentiometer
- Encoder
- Turn and push function
- Four-direction operator



The new M30 mounting system, M30 AFX, adapts automatically to different sheet metal thicknesses, making installation faster and more reliable.

## Perfect fit. Easy installation.

All M30 flat operators use the highly sophisticated M30 AFX mounting system, ensuring a secure fit and easy installation. In fact, both versions (anti-rotation tab with notch and anti-rotation tab without notch) will stay perfectly in place. When the latter is used, the straight edges of the rear mounting block make it possible to slightly adjust the device. Finally, when the knurled nut is tightened, a spring element simultaneously ensures that the assembly will automatically adjust to the sheet metal thickness.



## M30 mounting system

- Anti-rotation tab for perfect fit
- Flexible installation
- Easy alignment
- Automatically adapts to the sheet metal thickness



# Small size. Wide variety.

The M30 flat contact elements save space with a mounting depth that is over 33% smaller than standard, providing valuable space. The M22-F multi-color LED elements can reduce space and installation costs by producing up to seven different colors from just one LED.



One operator, seven different colors—the new M22-F flat multi-color elements (RGB) make it possible.

## Designed with space and compatibility in mind

The mounting depth for M30-F flat LED and contact elements has been reduced to a mere 30 mm. This slim design is particularly advantageous when it comes to machines with separate control terminals (e.g., pendant arms), as well as in any application with very little space available behind the cover.

All M22-F flat elements are compatible with the modular front elements and emergency stop devices in the Global Modular family, M22 and M30, ensuring that flat combinations can be used with all operators.

## Multicolor = multifunction

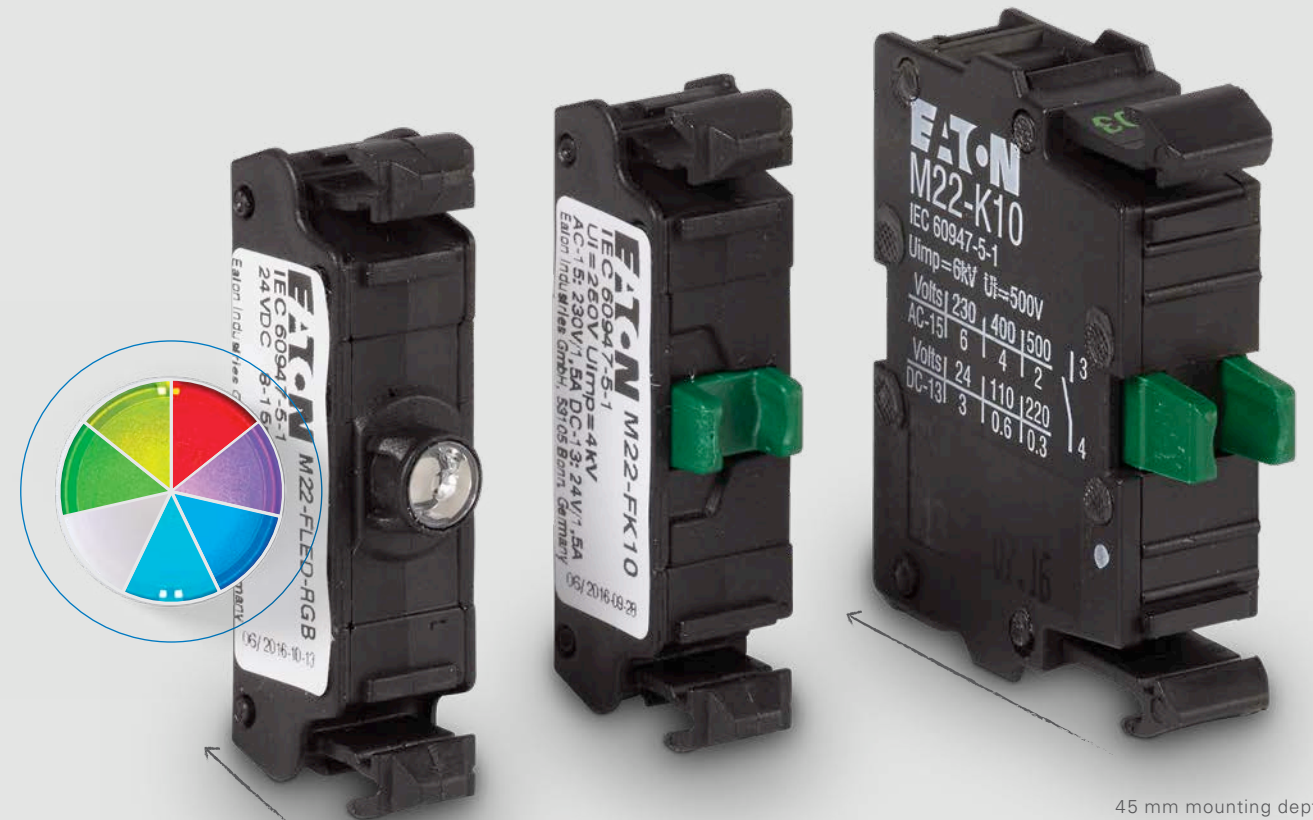
M22-F flat elements also include multi-color LED, 3-color (RG) and 7-color (RGB). This means that it is now possible to have seven colors with seven different functions on a single pushbutton, all defined according to your specific needs.

In addition to decreasing your inventory, multi-color LEDs also reduce your footprint and installation requirements, freeing up space, time and cost.

## Portfolio

- For applications within a range of 5 V to 500 V
- Available with screw terminals and spring-clamp terminals
- Front and base fixing
- Can be used worldwide thanks to numerous approvals
- Positive opening ensures that these elements can also be used for functional-safety applications

Whether with a flat or traditional design, Global Modular contact elements can be used and combined as necessary.



30 mm mounting depth

45 mm mounting depth

## One M22-F flat element, several looks

The new Global Modular flat rear LED elements make it possible to show various colors with a single pushbutton: three colors when using (RG) elements and up to seven (RGB) when using multi-color elements. In addition to this, you can define which color will correspond to which function—for example: red = stop, green = on, blue = fault, etc.



# Compact solution. Heavy-duty components.

The convenient all-in-one C22 and C30 with pigtail integrates the required cable, connector, and housing in one single device. The high degrees of protection in the front (up to IP69K) and at the back (IP65) of these devices make them the perfect choice for applications in which oil-tight protection from dirt or liquids is required.

All-inclusive—safe,  
ergonomic, efficient.



## Guaranteed safety

C22 and C30 with pigtail meets the requirements inherent to industrial environments with harsh conditions. Their high degree of protection—up to IP69K in the front and IP65 in the back—ensures that they can be installed without an enclosure, near control panels and directly on machines.

## Guaranteed efficiency

Easy plug-and-play installation is made possible by the devices' compact design. In addition, each compact device requires only one single catalog number. This considerably simplifies all the processes from selection, through ordering and stocking, all the way to installation.

## Guaranteed robustness

The special housing provides protection against dust, water, oil, cleaning products and fine foreign particles, making these devices perfect for direct installation, e.g., in woodworking machines or other machine tools in which direct contact with fine dusts or liquids needs to be prevented. On top of this, an IP69K degree of protection ensures that front elements such as pushbuttons, illuminated pushbutton indicator lights, and emergency stop buttons can be cleaned with pressure washers and steam jet devices—making them ideal for environments with stringent leak tightness and hygiene requirements.

## Guaranteed versatility

These compact devices are available with cable lengths of 20 cm, 50 cm, 1 m and 3.5 m. Moreover, both preconfigured cable connections with M12 or M8 plugs and cables with unterminated flying leads are available. The connectors allow for direct connection to communication systems, such as AS-6 or SmartWire-DT. The pilot devices will emit light non-stop for over 100,000 hours, which, combined with special lenses and color LEDs, ensures reliable operation of your application for the long term.



### The Compact C22 emergency stop solution for harsh environments

C22 with pigtail emergency stop buttons: Eliminate the need for a pushbutton enclosure, improve reliability, and reduce installation cost. With their high degree of protection in the front and at the back, these buttons are perfectly protected from dirt, dust and liquids.



# Easy integration. Smart communication.

SmartWire-DT provides the pilot devices of the Global Modular family, C22/C30/M22/M30, with communication capabilities, ensuring greater efficiency in all processes. In addition, Eaton has developed new potentiometers and encoders designed to make input and adjustments easier.



Direct connection to SmartWire-DT:  
The green ribbon cable connects  
pilot devices via the integrated  
M12 plug.



## Connect, don't wire

The Global Modular family can not only be used with standard wiring, but can also be easily integrated into automation architectures via standard bus systems. More specifically, integrated M12 and M8 plugs can be used to connect the complete devices directly to field buses such as AS-i or to SmartWire-DT.

## Less work, more efficiency

When it comes to complex environments with a large variety of pilot devices, there is simply no better choice than SmartWire-DT. The system not only reduces the time-consuming work and complexity involved in wiring, but also minimizes sources of error and maximizes diagnosability.

Moreover, its distributed intelligence and standardized communication with all devices is designed to make work significantly more efficient. To put it simply, this innovative communication system for industrial switchgear and automation components in control panels and peripherals makes it possible to plan, engineer, test, service and operate electrical systems much faster.

## Potentiometer values available right away

Global Modular SWD potentiometers can be used to quickly and easily make analog adjustments with SmartWire-DT systems. More specifically, these potentiometers are designed to replace conventional analog potentiometers, including all the corresponding interfaces, such as a power supply and peripherals for reading analog values. Moreover, they provide expanded diagnostic functions. To top it all off, the SmartWire-DT system ensures that potentiometer values will be available right away.

## Scroll, set, confirm

Global Modular SWD encoders are revolutionary when it comes to input for industrial applications. When combined with a touch panel, these encoders can be used to scroll as necessary through the screen menu, set setpoint values, and due to an integrated click function, apply settings immediately with a simple hand motion.

## Set to progress

### Global Modular SWD potentiometer

- Reduced installation and wiring costs and time
- Reduced material costs by eliminating the need for external A/D converters, analog inputs from PLCs, and external power supplies
- Improved system availability as a result of expanded diagnostic functionalities
- Easy installation and removal because of a modular system design
- High flexibility as a result of the fact that new modules can easily be added



### Global Modular SWD encoder

- Convenient input and menu navigation method—much like the one found on consumer devices
- Easy-to-use display controls are particularly useful when wearing gloves
- Expanded diagnostic functionality ("device malfunctioning," "front element not connected," etc.)
- Confirmation function, e.g., for resets or applying values
- Large, variable setting ranges



# One family. Endless possibilities.

A sleek design and innovative controls are two of the latest Global Modular innovations that will first catch your eye. The most stunning thing about Eaton's expanded pilot device range, however, is what is behind it: The extremely broad variety of possibilities offered by the Global Modular family, C22/C30/M22/M30.

## Modern operating convenience in harsh industrial environments

M30 potentiometers, encoders and joysticks with a sleek flat design can be easily and comfortably operated while wearing gloves and are designed for extreme ambient conditions.



## Numerous options available for selection

Flat or traditional, traditional LED or multi-color—your specific needs determine which characteristics are best for your machine design.



## The perfect combination of design and engineering

Sleek on the outside,  
smart on the inside—that  
is the combination that  
characterizes Eaton's  
industrial designs.



## New and time-tested elements can be combined freely

Flat design in the front, old contact element behind...  
or old front with a flat element behind—everything is  
possible with Global Modular M22/M30.





## Easy to select, configure and order

### With the Eaton pushbutton configurator

The new online tool provides a quick overview of all the pilot devices in the Global Modular series and the numerous combination options available.

With its intuitive user interface, the configurator is the perfect way to find out what the right solutions for your specific needs are. In addition, once all individual components have been selected, the configurator will show the assembled final product.

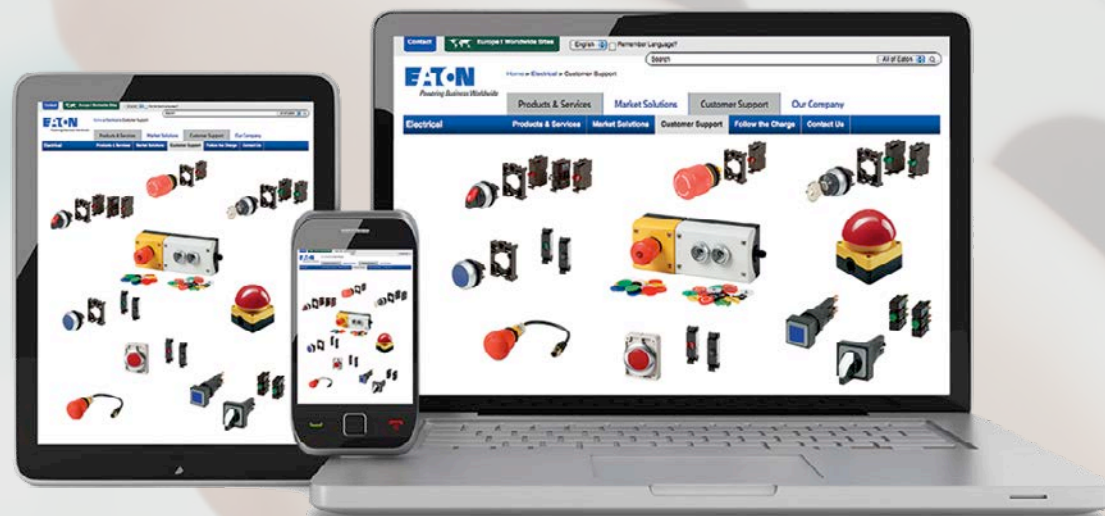
Moreover, the configurator also makes it possible to easily configure complete devices that are put together in a custom-tailored manner. Once you configure your pilot devices, you will be shown a convenient parts list that you can then use to easily order all the components you need.

### Custom labels

The integrated label editor function can be used to order customized inscriptions and specific designs for pilot devices directly in the pushbutton configurator, making it possible to customize individual devices as needed.

To use the Eaton pushbutton configurator, visit:

[Eaton.com/globalpbs](http://Eaton.com/globalpbs)



Eaton has added a series of new and innovative components to its Global Modular family of pilot devices. With features that open up a whole new world of possibilities.



# We make what matters work.\*

\* At Eaton, we believe that power is a fundamental part of just about everything people do. Technology, transportation, energy and infrastructure—these are things the world relies on every day. That's why Eaton is dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people's lives, the communities where we live and work, and the planet our future generations depend upon. Because that's what really matters. And we're here to make sure it works.

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