

TSL-ESCHA

MAFELEC TEAM – Your Partner for Future-Oriented Solutions in Transportation Technology



TSL-ESCHA and MAFELEC are jointly developing a comprehensive range of innovative solutions designed to enhance comfort and safety in both urban and long-distance public transport.

From intelligent lighting systems to intuitive control elements, these solutions significantly contribute to a more comfortable and secure passenger experience.

With a strong focus on continuous innovation, TSL-ESCHA and MAFELEC are setting new standards in passenger comfort. Both companies are part of the MAFELEC TEAM – a privately owned group of nine specialised companies offering expertise in human-machine interfaces (HMI), lighting systems and sensors. Their extensive knowledge spans across various

industries, including buses and railways, commercial vehicles, industrial applications, energy, defence, aerospace and elevators.

With over 700 employees, the group delivers innovative, tailor-made solutions to customers worldwide. Under the motto ‘One Team – One Company’, their combined global expertise drives the development of modern solutions for the transportation sector.

NEW: PK55 Push Button

With the innovative expansion of the PK5x series, TSL-ESCHA and MAFELEC focus on proven quality and enhanced functionality. The PK55 combines familiar design with advanced features, excelling in safety, efficiency, flexibility and intelligence for door applications.



Below: M-360 with touchless function



Above: PKT55 with touchless function



The PK55 embeds tactile actuation which ensures reliable and haptic feedback to comply with PRM requirements. Furthermore, the PK55 can be equipped with the touchless activation option M-Safe, which offers hygiene benefits and thus represents an ideal solution, especially for public transport.

Another highlight is the integrated 8mm plug connection on the back of the push button for 24VDC applications. This compact, round and mechanically reverse polarity protected IP67 connector offers a high degree of reliability for a simple 3 to 5-pole connection that complies with all transportation standards (ECER10, EN 50155, EN 61373, EN 45545-2...). Additionally, this reduces the number of connections in the door profile. This simplifies installation and reduces maintenance and repair work.

The expansion of the proven PK5x door opening push button series offers a high level of convenience, safety and efficiency to meet the needs of passengers.

NEW: M-360/WT or M-360/PT Handrail Push Button with Touchless Function

The M-360 is a triple push button with an innovative and elegant design that is mounted on the handrail or interior walls of all transportation vehicles requiring a stop request command (buses, trains, trams).

Accessibility to the stop request function is total for all passengers, whatever their position in the vehicle, thanks to its three large actuation and lighting zones

visible at 360 degrees in the pole-mounted version. The haptic feedback (click effect) associated with the change of lighting colour of all the buttons installed in the vehicle confirms that the request has been taken into account.

Colour, labelling, relief/braille and lighting are fully customisable to meet the design requirements of customers.

Additionally, MAFELEC has developed the M-360/WT and M-360/PT with an innovative touchless activation feature to meet the growing demands for passenger health and safety. The integration of the M-SAFE technology allows passengers to choose between tactile and touchless activation, enhancing the flexibility and user-friendliness of the push button. The distance and activation time of the touchless M-Safe technology can be adjusted to prevent unintentional activations.

NEW: HSTIAV Handrail Push Button – Versatile and Robust

TSL-ESCHA and MAFELEC offer a wide variety of handrail push buttons. Ranging from simple handrail push buttons to backlit indicators and touchless functions, these product families are highly versatile.

The HST series, first produced by TSL-ESCHA in 2004, has been further developed to offer a version with acoustic, visual and haptic feedback all in one. The HSTIAV model ('I' for 'illumination', 'A' for 'acoustics' and 'V' for 'vibration') features dual-colour lighting in red and green, along with vibration and acoustic feedback that activates briefly upon pressing the push button. This ensures that feedback is visible, audible and tangible. The goal is to provide passengers with an increased sense of security through multiple feedback options when activating the push button.

www.tsl-escha.com
www.mafelec.com
+49 2353 66796-0
info@tsl-escha.com



Creating together smart and sustainable interfaces

