

# TSL-ESCHA

## Passenger Comfort is Crucial



*The CK push button series impresses with its flat design and robust stainless steel front panel © TSL-ESCHA*



*HST handrail buttons from TSL are used on many buses and trains © TSL-ESCHA*

When using public transport, it is important for people with reduced mobility to be able to quickly find and operate door-opening push buttons.

Traveling by bus or train should be easy, safe and comfortable for every passenger. A door-opening

push button must work just as reliably in extreme heat and with dust as it does in high humidity or freezing temperatures. In addition to functional reliability, TSL-ESCHA products also focus on passenger comfort.

Passengers with reduced mobility should be able to recognise and operate TSL products easily. Push buttons, warning devices and signal lights comply with

the recommendations of the relevant associations and meet all requirements, including TSI-PRM (Technical Specification for Interoperability – Persons with Reduced Mobility).

To ensure that boarding and alighting can proceed smoothly during passenger change, push buttons must be recognisable at first glance. These must be clearly distinguishable in colour from the



*“It is important for us to always have our finger on the pulse and to set standards with new developments and the implementation of new requirements in order to give people with reduced mobility the best possible and safest feeling when traveling by bus and train.”*

surface on which they are mounted. The minimum contrast value is normatively required in EN 16584-1:2017 as well as in EU Regulation No. 1300/2014 (TSI PRM:2019) not only when new, but permanently. This is intended to ensure the best barrier-free access possible for visually impaired passengers in public transport.

In order to save the operator from having to regularly check the required contrast values, the operating elements of TSL are uniquely designed. The coloured pictographs are mounted behind a resistant transparent cover. As a result, the colours remain unchanged and the pictographs are protected against wear and soiling. In addition, the colours of the panels are applied using a coating process, providing long-term protection.

As the only manufacturer, TSL-ESCHA has always offered devices with the push button series CK, PK52 and PK that fully provide permanent contrast. Push buttons which have been in use for up to 20 years have proven this.

Similarly, the door control elements of TSL are not only identifiable by touch in accordance with TSI-PRM, but also provide additional haptic recognition options such as braille to visually impaired persons.

*“We attach great importance to the fact that our push buttons, warning indicators and signal lights comply with the standards and TSI-PRM and create added value for passengers,”* explains Klaus-Peter Schmauch, Technical Manager of TSL-ESCHA. *“Large touch surfaces, optimum brightness of the LEDs, braille, and acoustic warning and information signals make it easier for people with impaired hearing and vision as well as mobility-impaired passengers to participate in traffic.”*

TSL-ESCHA develops, manufactures and distributes customised solutions. For example, a handrail button with vibration feedback (HSTIV) was developed for a customer project in Scandinavia, as there was previously no comparable solution. The vibration feedback starts for a short time when the button is pressed, so that additional feedback is felt. This function is

intended to offer more comfort and safety for visually impaired passengers.

The HSTIV is also available with optional lighting. The colour green stands for better localisation of the handrail button. The colour red provides visual acknowledgement of the stop request after the button has been pressed. This assures the passenger that their stop request has been accepted, especially in fully occupied vehicles when the “bus stop” signal cannot be recognised.

In combination with the vibration feedback, passengers can feel and see the button being pressed. Everything for more safety and a smooth process in public transport.

For more information, visit [www.tsl-escha.com](http://www.tsl-escha.com) or contact the TSL-team at [info@tsl-escha.com](mailto:info@tsl-escha.com) with any questions.



# Customized Solutions for Bus, Train and Tram



Door Opening Push Buttons PK52, CK and PK  
and Hand Rail Button HSTI