



SSP

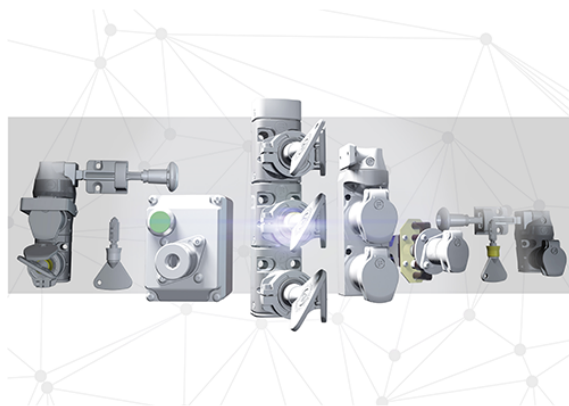
Safety System Products

key transfer

Mechanical key transfer system with a robust design

Your advantages

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we simplify safety

key transfer

mGard is a modular, purely mechanical key transfer system for highly robust applications. It is a tried-and-tested solution for safeguarding dangerous machines and processes up to SIL3 (ENIEC 62061), category 4 and PLe according to EN ISO 13849-1 in an inexpensive way without laying cables.

The system works with keys that are mechanically locked or released in combination with one another based on a previously defined process. In the simplest case, a key that can be used to unlock an access point is released after the machine has been shut down.

This basic principle of a key transfer system can be used for all applications where it is necessary to ensure that the machine or plant is in a safe state before access to it is permitted.

DIN EN 14119:2003 also describes the key transfer systems very specifically as a locking device based on the transfer of a key between the key switch and the key lock. The system is characterized by the key, which is always held either in the key switch or on the key lock. In concrete terms, this means that the key is not released until the guard is securely closed and locked.

A combination of different processes is also possible, as shown in the drawing below.

When the plant is stationary, the key is first removed, which interrupts the safety circuit via positively driven contacts.

With the red key, the operator can now release two further blue keys in a purely mechanical "key exchange box". These keys now open a flap and a door. A single lock is used for the hatch, which cannot be stepped behind. The blue key is entered and the hatch is thus opened. The key cannot be removed while the hatch is open.

Key lock connected with security system Key exchange station Flap Door

Key in control cabinet

A double lock with comparable logic is used for the door, which can be stepped behind. However, in addition the operator removes a safety key (green) and takes it with him into the plant. This key is used for personal security. To start the plant, the entire procedure must be carried out in reverse order. The keys are high-coded with more than 1000 codes according to DIN EN 14119:2013.

key transfer

Downloads

- Product line