

Pressure-sensitive Safety Devices

Safety Mats HSM®

Safety Mats HSM®

For the protection of hazardous areas

Safety mats are employed to protect hazardous areas at machines and other equipment.

When a person steps on the Safety Mat HSM®, it will immediately switch off the power source. As long as the person stays on the mat, the machine cannot be restarted.

Our Safety Mats are equipped, similar to our Safety Edges HSC®, with mechanical, positive-opening contacts. Therefore, an additional safety control unit is not needed.

The contact mat is placed between polyurethane mats protecting it against environmental influences. The cover material has a slip-resistant structure. The Safety Mats are manufactured in the size specified by the customer. Larger areas are achieved by placing several mats side by side. Around the final mat surface, an aluminium border trim is installed and fixed onto the ground by screws.

Very different conditions of use can be found in practical applications. In your enquiry, please specify them so we can select the most suitable configuration. In order to meet the respective conditions, we use polyurethane as a standard material for the outside cover. Other materials may be possible, please ask us. The surface structure can also be varied, depending on the actual conditions. In order to reduce the risk of slipping, the cover material is checked.



Pressure-sensitive Safety Devices

Safety Mats HSM®



Safety Mat HSM® with mechanically opening contacts



- no additional control unit required
- wired directly to existing E-stop relay unit
- suitable for harsh environments
- different surface materials depending on application
- dimensions to customers' specification
- supply of ready-to-use Safety Mats including machined ramp trim
- BG approved

Design and mode of operation of the Safety Mat HSM®



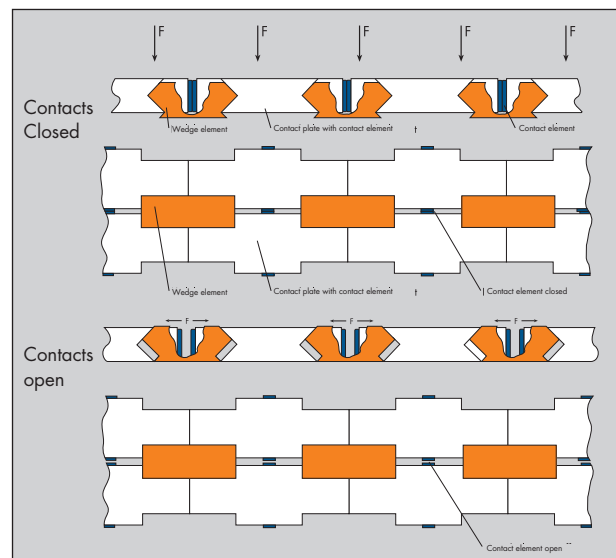
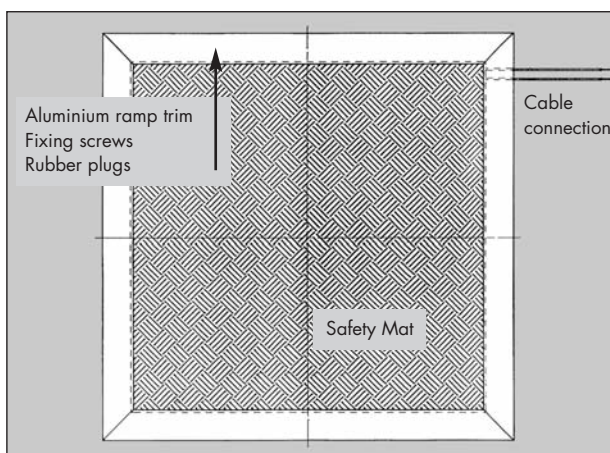
Our Safety Mats HSM® are built up of mechanically opening N/C contacts connected in series, in the form of a contact mat – similar to the unique Haake Contact Chain®.

Current conducting contact plates and insulating intermediate wedge elements are alternately lined up on an expander cord. By pretension, the contact elements are pressed together, and the current circuit is made.

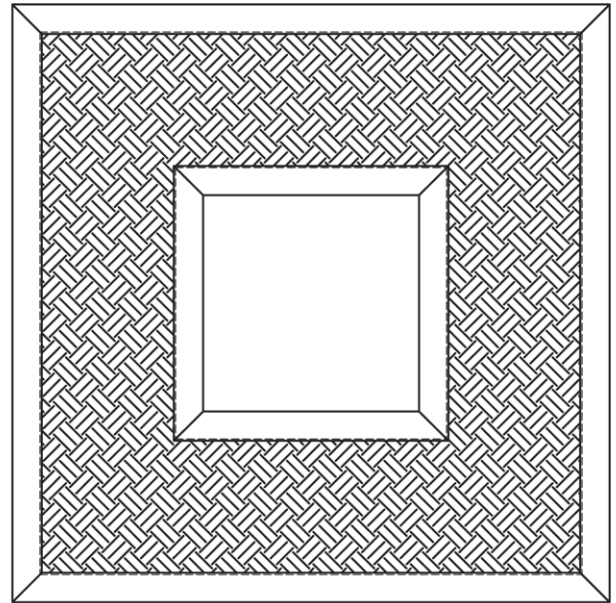
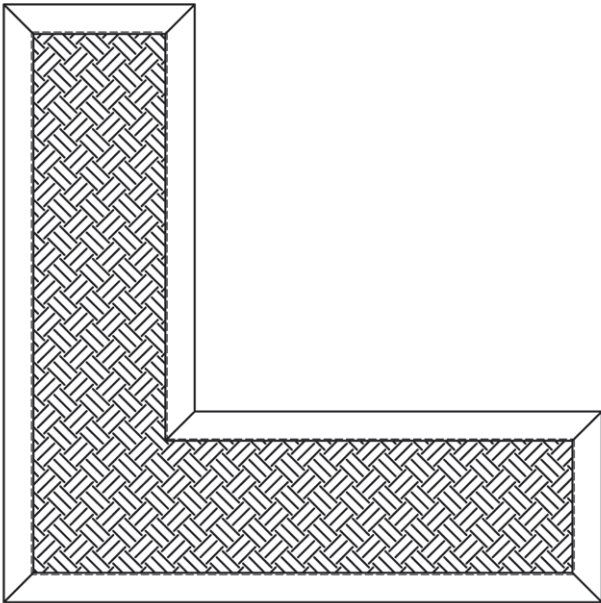
When stepping on the Safety Mat, the wedge elements separate at least one of the contact elements. The current circuit is broken.

Since a circuit interruption signal is directly available, transformation of the output signal is not required. This signal is fed to the safety relay unit already needed for the E-stop button.

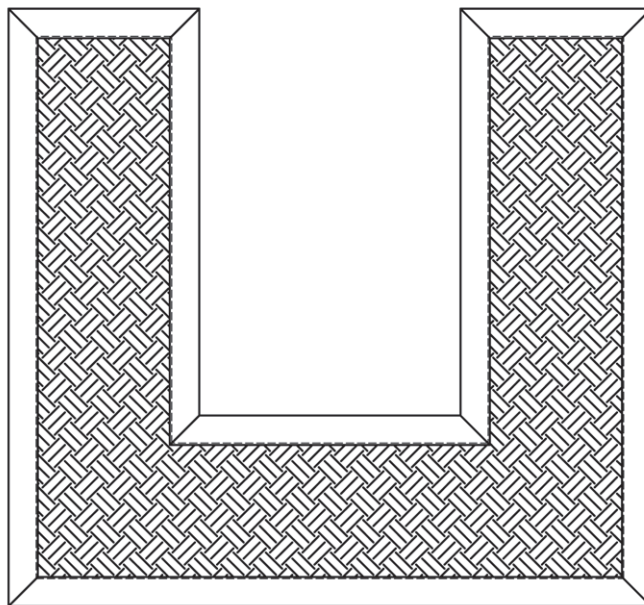
The number of the lined-up contact elements and of the wedge elements depends on the size of the Safety Mat. The Safety Mat is placed between polyurethane mats protecting it against environmental influences. The cover material has a slip-resistant structure.



Special designs of the Safety Mat HSM®



Special designs L-shaped, quadrangular with internal cut-out and U-shaped.



Special designs of the Safety Mat can be manufactured upon request.

You will find detailed product information and data sheets under www.haake-technik.com or on the enclosed CD.