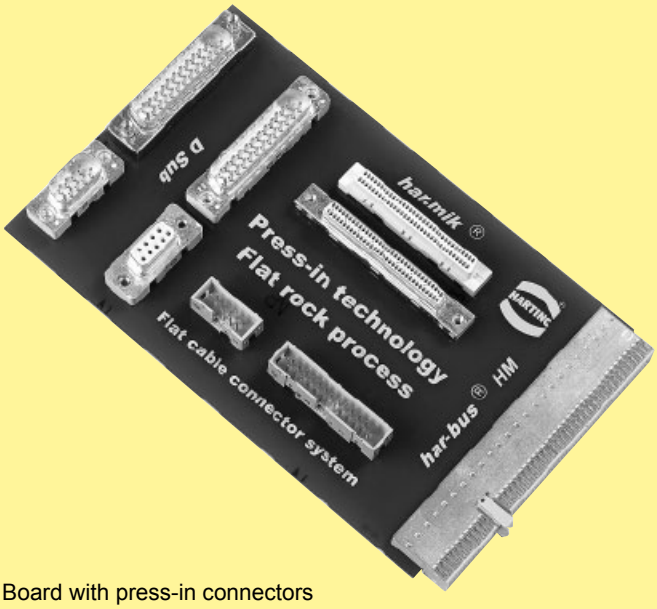
Solderless termination for connectors has proven to be reliable for decades. Today the use of press-in connectors encompasses all fields of electrical and electronical applications.

Pressing of electrical components, mainly connectors, is characterised through the matching of the connector pin and the plated through hole of the pcb. Whereas the desired electrical characteristics can be attained relatively independant from the design of the press-in zone, the mechanical characteristics of the press-in zone are crucial for the reliable assembly of connectors where pcb's have different surfaces.

Although the scope of requirements at the press-in process is generally defined in time-tested specifications, the novel press-in zones should offer an optimal handling and a reliable termination. Essentially, this is guaranteed through the design of the press-in zone and the meticulous observance of tolerances. HARTING has been using FEM simulations for the calculation and optimisation of press-in zones for a long period of time. This expertise allows us to simulate various pcb configurations very accurate.

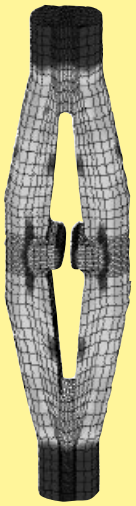
Due to variety of different connector contact designs, the press-in zone has been designed to fit perfectly to the contact metal thickness and the plated through hole dimensions and tolerances.



Board with press-in connectors

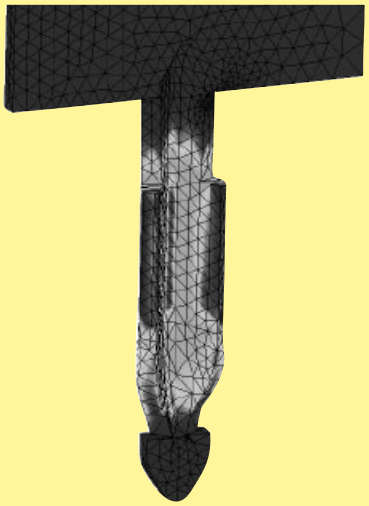
har-mik®

The patented contact design allows 20 % more tolerance on the plated through hole of 0.6 mm than the standard tolerance of $0.6^{+0.07}_{-0.05}$ mm.



D-Sub

The terminating spoon shape of the contact provides a reliable vertical position of the connector for better alignment during insertion.



SEK

The renowned needle eye allows for compensation of tolerances of pcb surface properties. The excessive material is displaced within the plated through hole whereby a gastight connection is assured.