



Pushing Performance

HARTING *har-flex*



People | Power | Partnership

Small, flexible, robust: HARTING *har-flex*

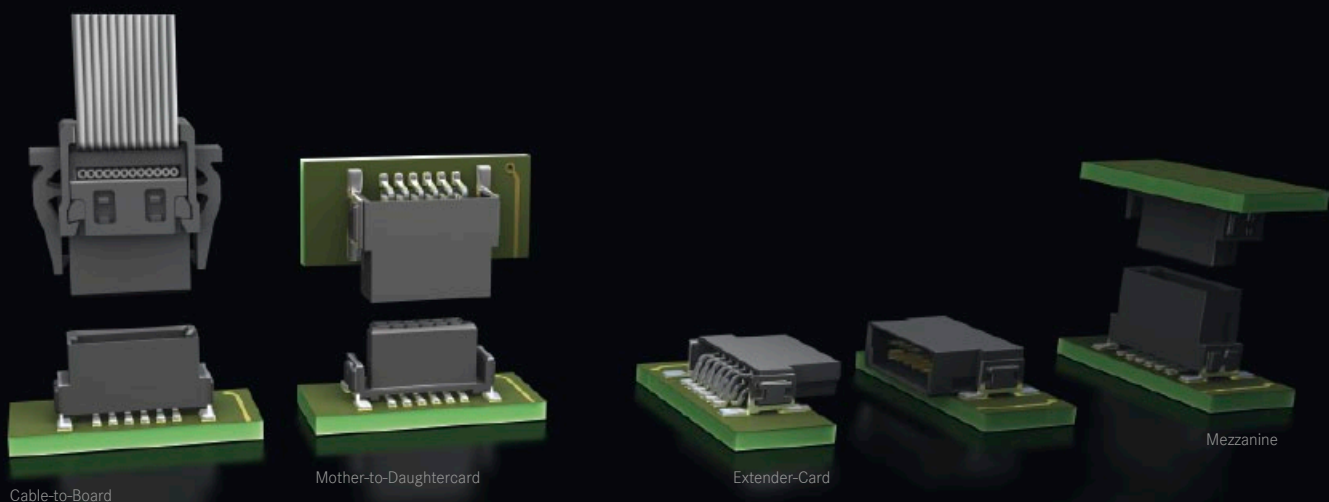
With *har-flex*, HARTING has developed a general-purpose series for internal and external Device Connectivity. The product range provides both internal solutions with optimized PCB connectivity in a first step, as well as external solutions for Installation Technology based on a wide spectrum of interfaces in a second step.

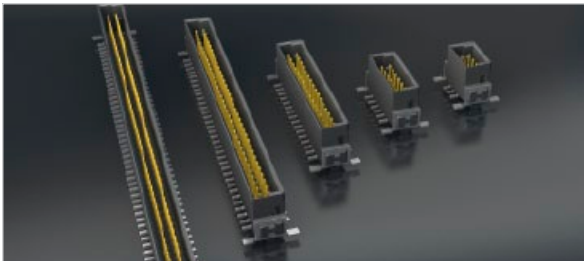
The continuous scalability by an even number of contacts, i.e. from 6 to 100, of the HARTING's *har-flex* mezzanine connector series is a special feature forming an ideal basis for customized applications. The advantage is clearly evident considering that the connector is always optimized to suit specific applications on the device PCB, while also covering the medium- and small-scale volume range that is typical for the production of industrial devices.

This flexibility is new – and represents a standard at HARTING. The triad of Device Connectivity, Installation Technology, and Automation IT creates ideal connectivity solutions for the data, power, and signal lifelines. Solutions that position customer applications as decisive factors. And the outlooks are bright – because there is a lot more to come.

Product diversity

The *har-flex* product range with SMT technology is based on a 1.27 mm grid. With its angled and straight variants that support four different stacking heights and a range of cable connectors, HARTING provides connectivity solutions for many different board-to-board applications.





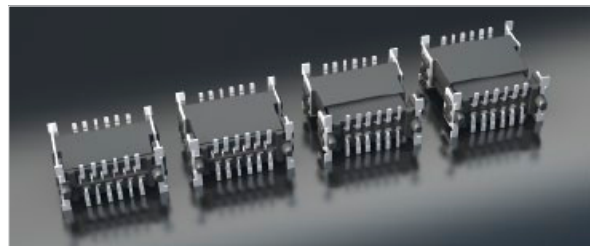
All variants providing between 6 and 100 poles will be made available in even numbered positions

Many pin count options

HARTING has developed a modular tooling concept which offers a broad choice of configurations between 6 and 100 poles in even numbered positions. This flexibility in the choice of number of contacts, combined with high density contact spacing, allow the designer to maximize the use of PCB real estate, thereby achieving overall space savings and cost efficiencies.

Flexible board-to-board distances

HARTING covers mezzanine applications with a range of straight versions for four different stacking heights that can be used to interconnect PCBs arranged in parallel stacks with spacing between 8.0 mm and 13.8 mm. Additional stacking heights are in development. For applications requiring larger spacing between boards HARTING offers compatible cable-to-board connectors with insulation displacement technology.



Four different stacking heights: parallel PCB clearances between 8.0 mm and 13.8 mm



Special SMT fixing ensures a robust connection to the PCB

Robust design

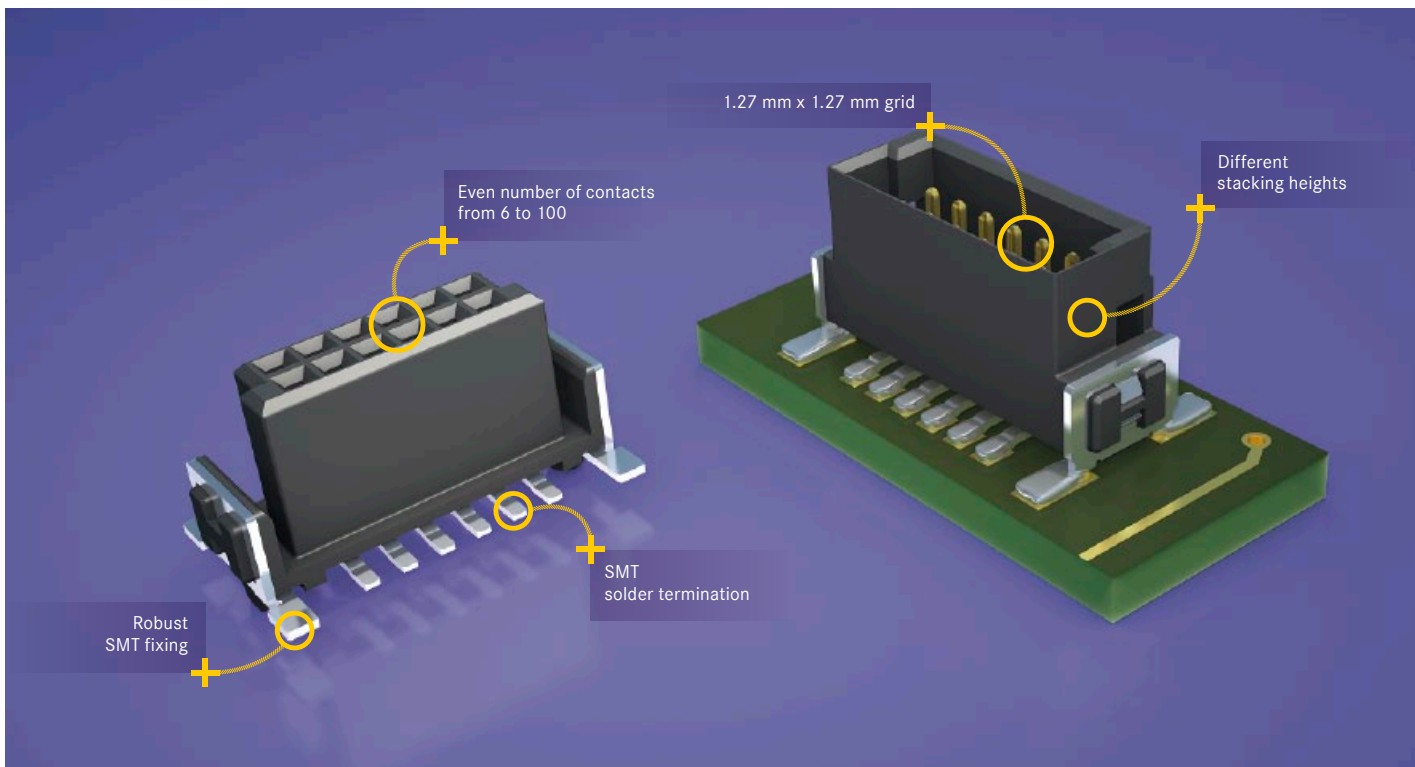
The special SMT fixing ensures a robust and enduring connection to the PCB and helps to absorb mechanical stress on the solder contacts resulting from insertion and removal forces.

Automated processing features

The *har-flex* SMT connectors meet the highest demands in terms of their processing capabilities. Special blister packaging provides protection during shipping and handling, while the “pick and place” pads enable automated assembly of the PCBs. The temperature resistant materials of the insulating body, in combination with consistent testing of the coplanarity of contacts, ensure reliable soldering capabilities of the connectors in the reflow process.



Suitable for reflow soldering

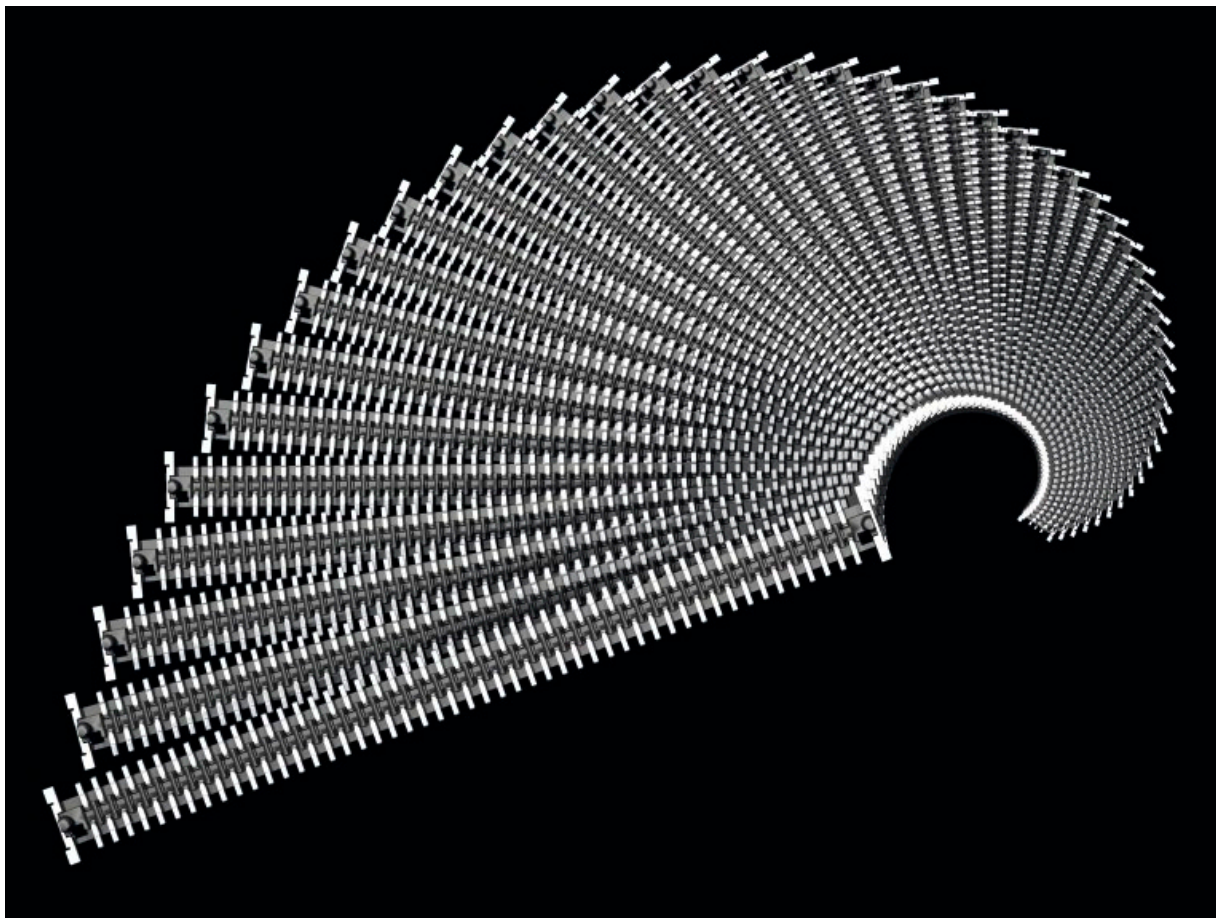


For the designs of today, addressing the needs of the future, the **HARTING har-flex** series is the perfect choice for all board-to-board applications where versatility is a must and space is at a premium.

YOUR ADVANTAGES AT A GLANCE

- Optimized utilization of PCB real estate due to flexibility in choice of contact count
- High contact density for reduced footprint
- Availability of straight, right angled and IDC variants
- Robust design
- Suitability for automated processing
- Flexible PCB clearances

Order the sample for your required stacking height



Samples are available on request starting in Q1/2011. Please contact your local HARTING representative to order using the part number structure listed below:

Order number, 14-digit: Male connectors, straight

1	5						6	6	0	1	3	3	3
Stacking height		Even number of pins											
11 for 1.75 mm		006 - 100											
12 for 3.25 mm													

Order number, 14-digit: Female connectors, straight

1	5						6	6	0	1	3	3	3
Stacking height		Even number of pins											
21 for 6.25 mm		006 - 100											
22 for 9.05 mm													

Samples of the female connectors for cable-to-board application and angled termination will be available in Q3/2011 and Q4/2011 respectively.



Pushing Performance

www.HARTING.com