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Pushing Performance

HARTING Interface Connectors

Transforming customer wishes into concrete solutions

The HARTING Technology Group is skilled in the fields of electrical, electronic and optical connection, transmission and networking, as well as in manufacturing, mechatronics and software creation. The Group uses these skills to develop customized solutions and products such as connectors for energy and data transmission applications including, for example, mechanical engineering, rail technology, wind energy plants, factory automation and the telecommunications sector. In addition, HARTING also produces electro-magnetic components for the automobile industry and offers solutions in the field of Enclosures and Shop Systems.
The HARTING Group currently comprises 36 subsidiary companies and worldwide distributors employing a total of more than 3,450 staff.

HARTING Subsidiary company HARTING Representatives

We aspire to top performance.

Connectors ensure functionality. As core elements of electrical and optical wiring, connection and infrastructure technologies, they are essential in enabling the modular construction of devices, machines and systems across a very wide range of industrial applications. Their reliability is a crucial factor guaranteeing smooth functioning in the manufacturing area, in telecommunications, applications in medical technology – in fact, connectors are at work in virtually every conceivable application area. Thanks to the consistent further development of our technologies, customers enjoy investment security and benefit from durable, long term functionality.

Always at hand, wherever our customers may be.

Increasing industrialization is creating growing markets characterized by widely diverging demands and requirements. The search for perfection, increasingly efficient processes and reliable technologies is a common factor in all sectors across the globe.

HARTING is providing these technologies – in Europe, America and Asia. The **HARTING** professionals at our international subsidiaries engage in close, partnership based interaction with our customers, right from the very early product development phases, in order to realize customer demands and requirements in the best possible manner.

Our people on location form the interface to the centrally coordinated development and production departments. In this way, our customers can rely on consistently high, superior product quality – worldwide.

Our claim: Pushing Performance.

HARTING provides more than optimally attuned components. In order to serve our customers with the best possible solutions, **HARTING** is able to contribute a great deal more and play a closely integrative role in the value creation process.

From ready assembled cables through to control racks or ready-to-go control desks: Our aim is to generate the maximum benefits for our customers – without compromise!

Quality creates reliability – and warrants trust.

The **HARTING** brand stands for superior quality and reliability – worldwide. The standards we set are the result of consistent, stringent quality management that is subject to regular certifications and audits.

EN ISO 9001, the EU Eco-Audit and ISO 14001:2004 are key elements here. We take a proactive stance to new requirements, which is why **HARTING** ranks among the first companies worldwide to have obtained the new IRIS quality certificate for rail vehicles.

HARTING technology creates added value for customers.
Technologies by **HARTING** are at work worldwide. **HARTING**'s presence stands for smoothly functioning systems, powered by intelligent connectors, smart infrastructure solutions and mature network systems. In the course of many years of close, trust-based cooperation with its customers, the **HARTING** Technology Group has advanced to one of the worldwide leading specialists for connector technology. Extending beyond the basic functionalities demanded, we offer individual customers specific and innovative solutions. These tailored solutions deliver sustained effects, provide investment security and enable customers to achieve strong added value.

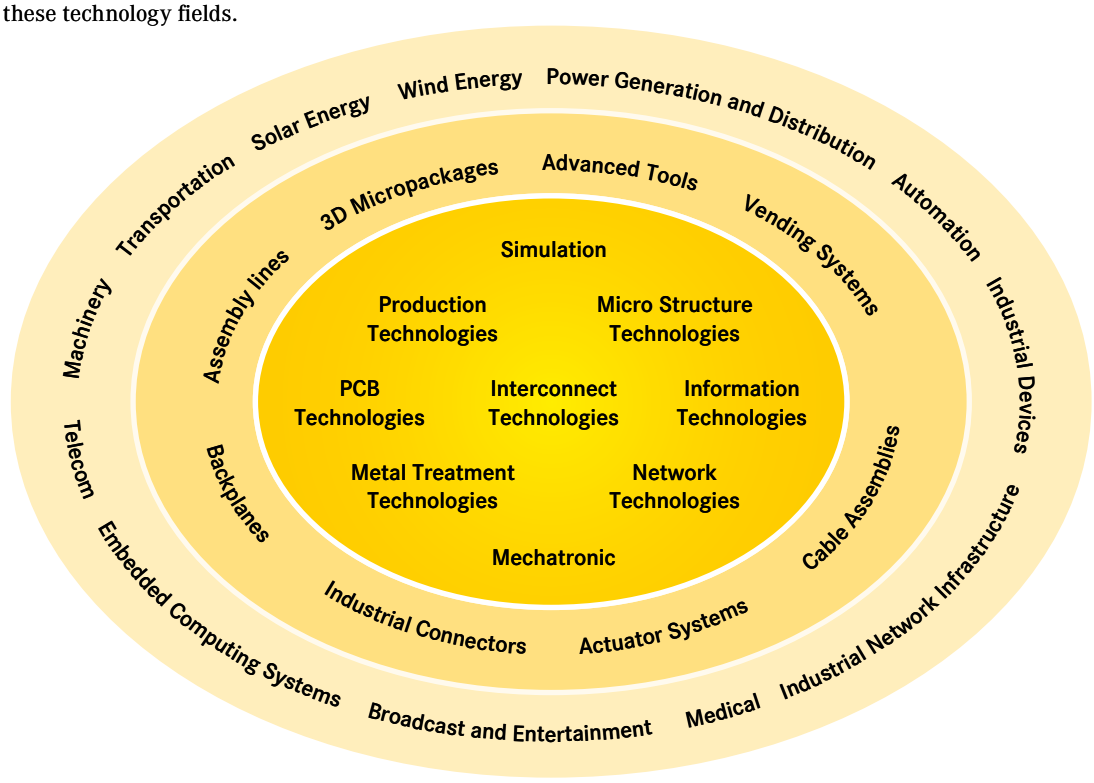
Opting for HARTING opens up an innovative, complex world of concepts and ideas.
In order to develop connectivity and network solutions serving an exceptionally wide range of connector applications and task scopes in a professional and cost optimized manner, **HARTING** not only commands the full array of conventional tools and basic technologies. Over and beyond these capabilities, **HARTING** is constantly harnessing and refining its broad base of knowledge and experience to create new solutions that ensure continuity at the same time. In securing this know-how lead, **HARTING** draws on a wealth of sources from both in-house research and the world of applications alike.
Salient examples of these sources of innovative knowledge include microstructure technologies, 3D design and construction technology, as well as high temperature or ultrahigh frequency applications that are finding use in telecommunications or automation networks, in the automotive industry, or in industrial sensor and actuator applications, RFID and wireless technologies, in addition to packaging and housing made of plastics, aluminum or stainless steel.

HARTING solutions extend across technology boundaries.
Drawing on the comprehensive resources of the group's technology pool, **HARTING** devises practical solutions for its customers. Whether this involves industrial networks for manufacturing automation, or hybrid interface solutions for wireless telecommunication infrastructures, 3D circuit carriers with microstructures, or cable assemblies for high-temperature applications in the automotive industry – **HARTING** technologies offer far more than components, and represent mature, comprehensive solutions attuned to individual customer requirements and wishes. The range covers ready-to-use cable configurations, completely assembled backplanes and board system carriers, as well as fully wired and tested control panels.
In order to ensure the future proof design of RF- and EMC-compatible interface solutions, the central **HARTING** laboratory (certified to EN 45001) provides simulation tools, as well as experimental, testing and diagnostics facilities all the way through to scanning electron microscopes. In the selection of materials and processes, lifecycle and environmental aspects play a key role, in addition to product and process capability considerations.

HARTING knowledge is practical know-how generating synergy effects.

HARTING commands decades of experience with regard to the applications conditions of connectors in telecommunications, computer and network technologies and medical technologies, as well as industrial automation technologies, such as the mechanical engineering and plant engineering areas, in addition to the power generation industry or the transportation sector. **HARTING** is highly conversant with the specific application areas in all of these technology fields.

The key focus is on applications in every solution approach. In this context, uncompromising, superior quality is our hallmark. Every new solution found will invariably flow back into the **HARTING** technology pool, thereby enriching our resources. And every new solution we go on to create will draw on this wealth of resources in order to optimize each and every individual solution. In this way, **HARTING** is synergy in action.



D-Sub Filter adapters

HARTING offers a new range of male/female Subminiature D Filter adapters with 9, 15, 25 or 37 pins. The adapters are available in 4 standard filter values 47 pF, 470 pF, 1000 pF and 3900 pF for effective electronic noise reduction in various applications from high-speed digital broadcasting to industrial test equipment.

HARTING filter adapters are ideally suited for both EMI corrections in existing applications and for quick and easy filter tests during the design phase.

Completing the large HARTING SMC filter D-Sub range proposing all filter D-Sub in standard D-Sub dimension and standard layout, HARTING new filter D-Sub adapters propose in all situations a perfect retrofit solution to protect applications against electromagnetic radiation effects without involving expensive PCB redesign.

Details you can find on page 05.09.

D-Sub Filter

Standard and low profile D-Sub SMT connectors

The new design has been optimized around key points to provide reliable processing and long-term usage. It allows surface mounting of this very standard connector, thus simplifying PCB assemblies and broadening its range of application.

100% co-planarity is achieved by the combination of the stamped terminals and the specially designed insulator. This design has resulted in a robust solution capable of withstanding all normal handling processes.

The die cast brackets offer a large solder area on each side of the connector to add significant physical mounting resiliency. In addition they control the centre of gravity to secure perfect stability of the connector all along the reflow process.

The product range includes 9 to 37 positions, standard angled with a large choice of mounting hardware, such as M3 & 4-40 UNC threaded inserts or non-removable female screw locks.

The performance levels 1, 2 and 3 are standards; for other requirements, please contact your HARTING local representative.

All variants are delivered in a packaging, suitable for automated processing.

Details you can find in chapter 21.

D-Sub SMT

Extension of the D-Sub mixed range

HARTING's mixed D-Sub range brings the advantage of an industry standard I/O interconnect product with the possibility to customize for any application.

The range is designed around the standard D-Sub shell sizes with the possibility to have a blend of contacts such as signals with coaxial, power, high voltage or pneumatic contacts. Due to its construction, the product is fully shielded and helps reducing the EMI/RFI leakage.

All contacts are machined with two different platings.

When hot plug-in is required, first mate last break contacts can also be supplied.

In addition, a complete range of accessories such as clinch nut, spacers, board locks, female screw lock, etc. ... meeting the requirements of virtually any application, including a blind mate feature, makes this product range very attractive thanks to its versatility, reliability and cost effectiveness.

Details you can find in chapter 04.

D-Sub mixed