

Transforming customer wishes into concrete solutions

Intro-
duction

Headquartered in Espelkamp in East Westphalia, Germany, the HARTING Technology Group develops tailored solutions and products revolving around electrical and electronic connector technologies. These offerings focus on power and data transmission applications, as well as on network solutions. Founded in 1945 in Minden, HARTING is currently employing a workforce of more than 3000 members of staff worldwide.

In today's increasingly knowledge and information shaped societies, the capability to network and integrate with customers and suppliers, as well as technology and business partners is playing the decisive role.

And this applies to national as well as international levels. With 40 Subsidiary companies and Representatives in 27 countries, HARTING is committed to maintaining close proximity to markets and customers. Always at hand on location, HARTING is able to rapidly record market impulses and respond flexibly.



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.

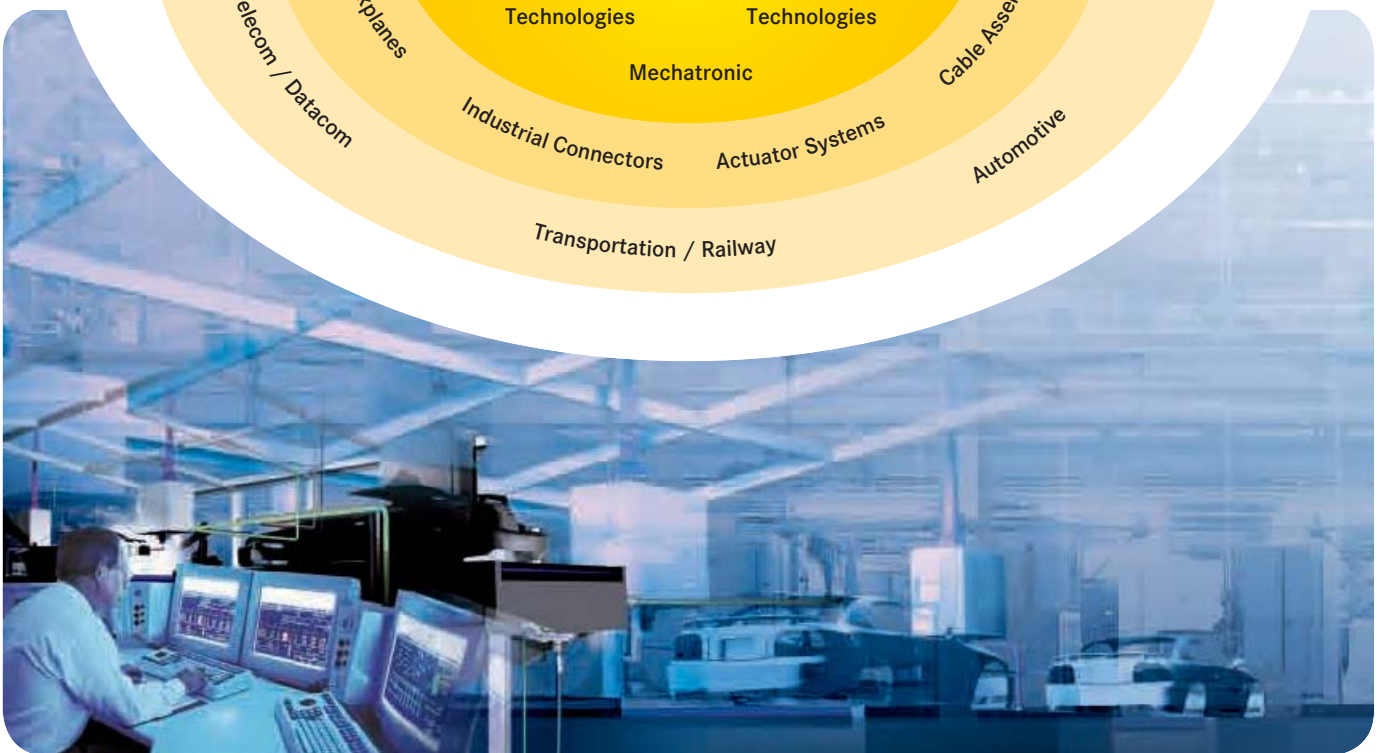
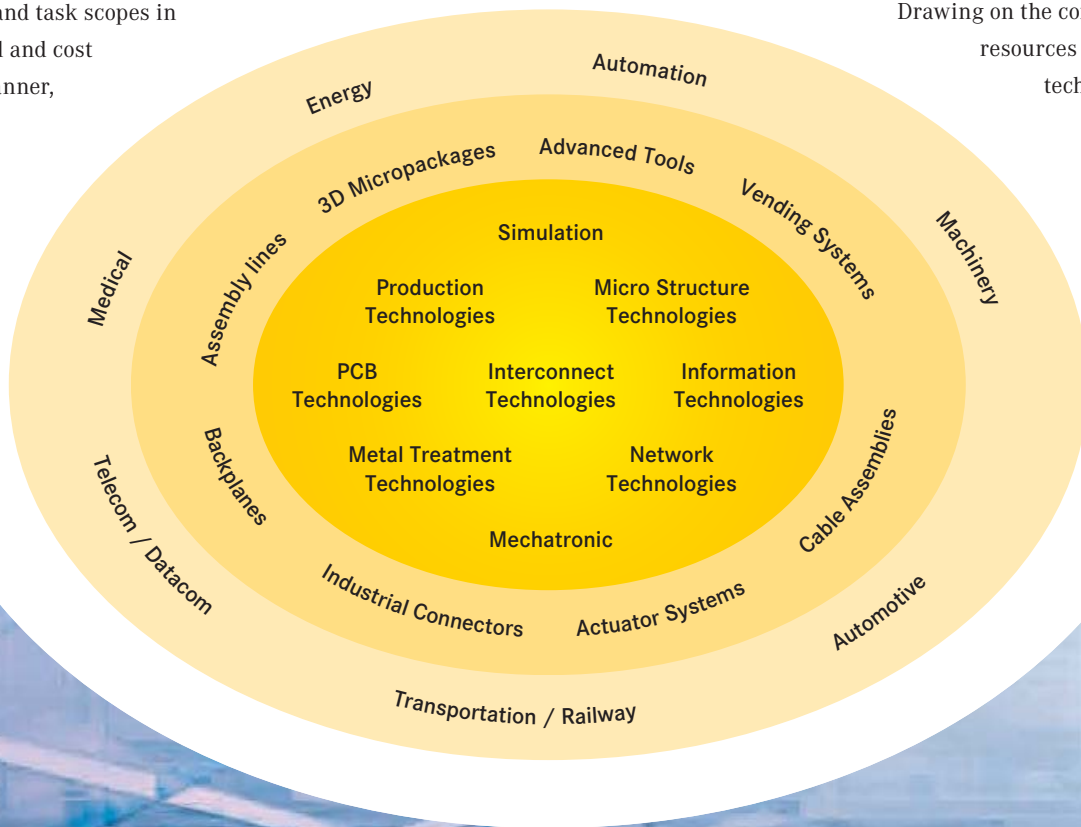
In order to develop connectivity and network solutions serving an exceptionally wide range of connector applications and task scopes in a professional and cost optimized manner, HARTING not only

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.

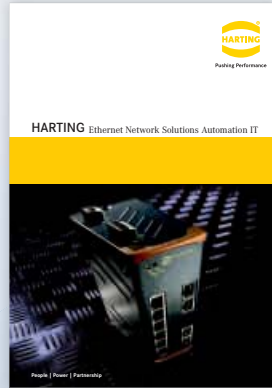
HARTING KNOWLEDGE IS PRACTICAL KNOW-HOW GENERATING SYNERGY EFFECTS.

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.



Automation IT



ETHERNET NETWORK SOLUTIONS

The Automation IT catalogue offers a consistent range of Ethernet network components and cabling products, which form the communication platform of convergent Automation IT

networks. The performance of network components opens up access to a wide range of applications for industrial buildings, manufacturing plants and machines in industrial environments.

Installation Connectivity



INDUSTRIAL CONNECTORS Han®

This catalogue documents the worldwide standard for industrial connectors. Han® connectors represent the preferential solution in the cable-to-cable interconnection of data, signal and power applications operating under the most

demanding conditions and meeting stringent requirements with regard to safe and detachable electrical connections with high degree of protection IP 65 / IP 67. Installations making use of Han® connectors impress with their rugged design, convenient handling and modularity of data, signal and power connections. Han® connectors represent the worldwide standard in industry, railway technology, as well as in power generation and distribution.

Device Connectivity



DEVICE CONNECTIVITY DeviceCon

The DeviceCon catalogue provides a universal, innovative product portfolio of PCB connections and of termination technology. The product range comprises board-to-board and cable-to-board connectors for industrial

electronic devices with degree of protection IP 20 to IP 65 / IP 67. These HARTING solutions offer appropriate device connectivity for a wide range of devices, ranging from sensors to industrial computers and their respective data, signal and power interfaces.

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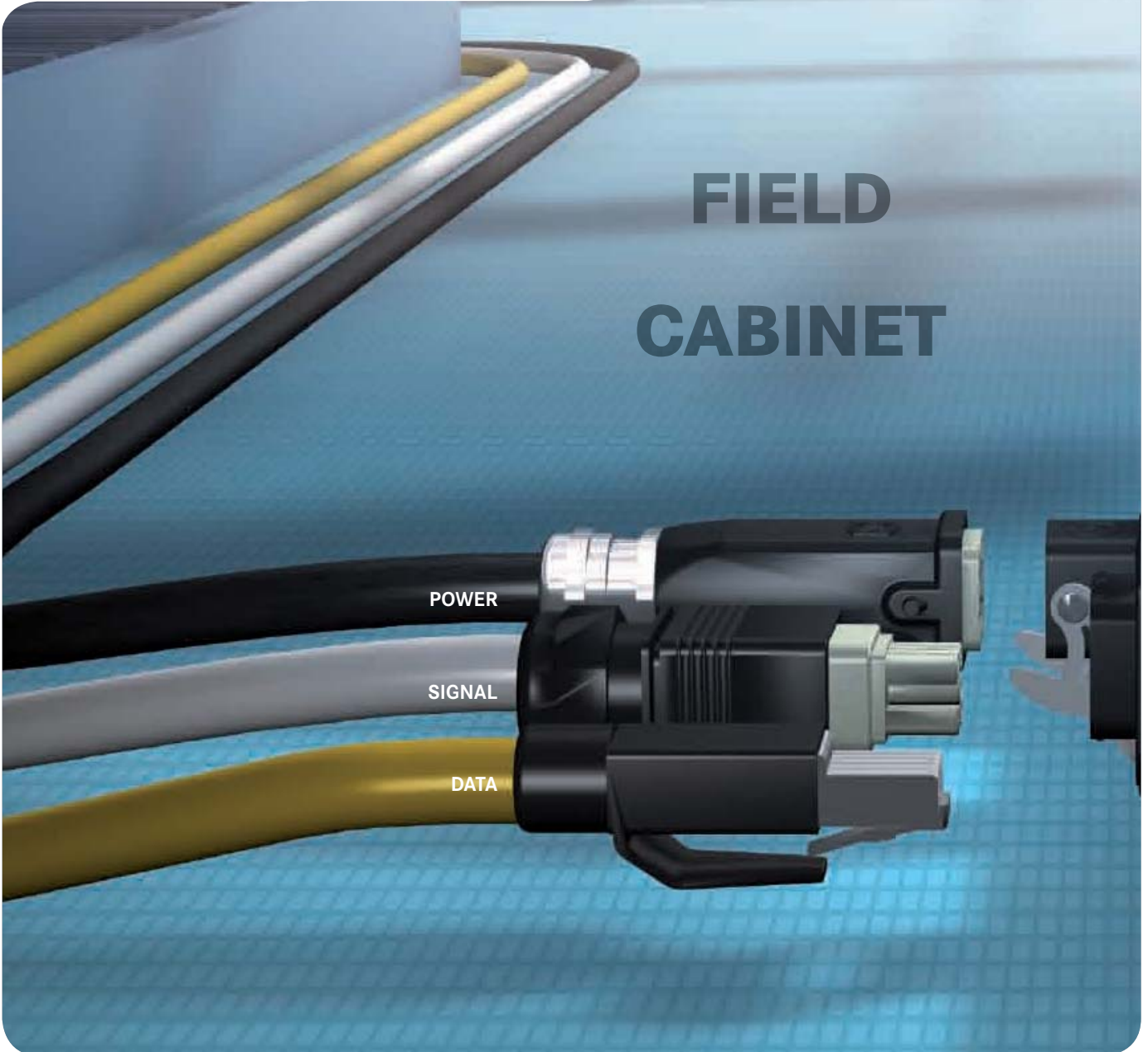


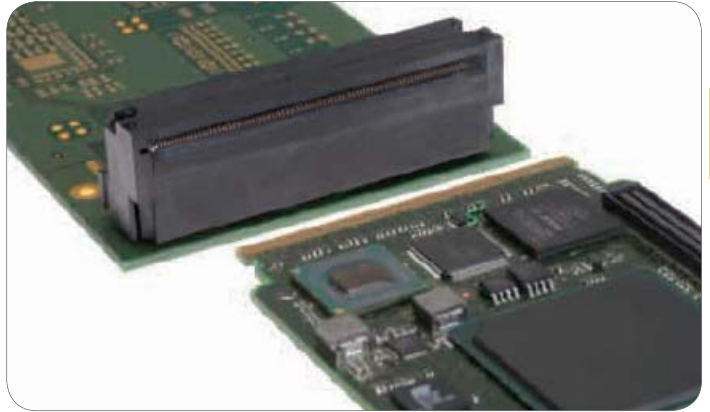
CABLE- / WIRE-TO-BOARD

Whatever your applications may be, HARTING has the ideal solutions for your data, signal and power connectivity requirements with its matching cable-to-board and wire-to-board technologies with degree of protection IP 20 to IP 65 / IP 67.



FIELD CABINET

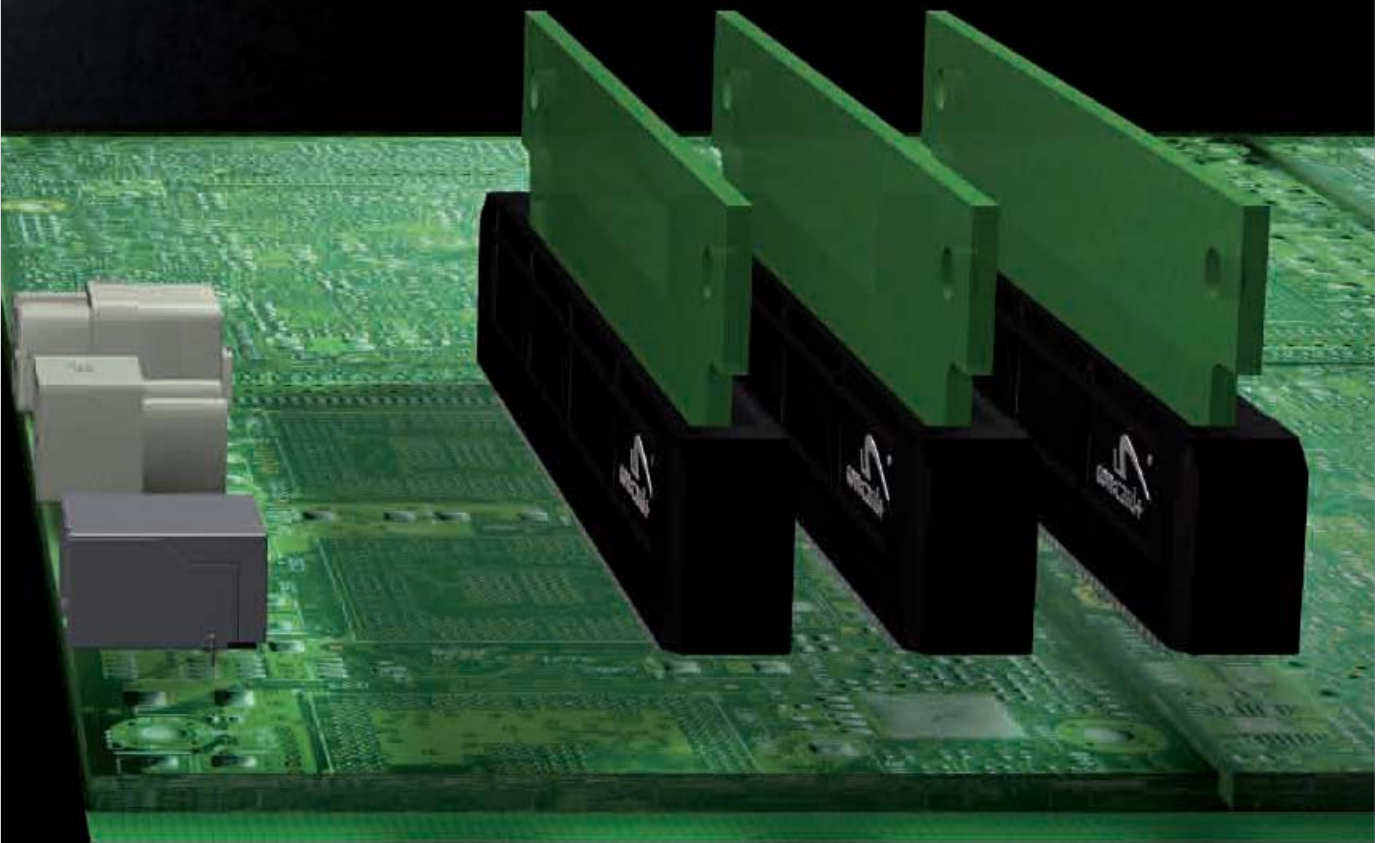


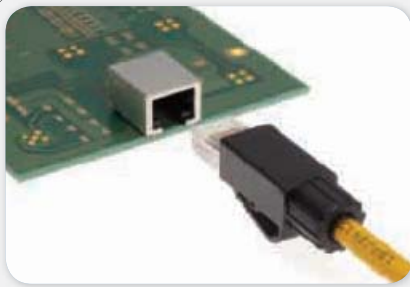


BOARD-TO-BOARD

Regardless of your device configuration, HARTING always has an ideal board-to-board connector with maximum packing density and optimal performance with regard to signal transmission and integrity.

DEVICE





01. HARTING RJ INDUSTRIAL® – RJ45

HARTING offers a wide range of RJ45 contact inserts and matching RJ45 connectors for quick and reliable termination of your 2- or 4-pair Ethernet cables. The RJ Industrial connector family also supports Ethernet automation profiles such as PROFINET, Ethernet/IP, EtherCAT and Powerlink. The HARTING RJ Industrial® connectors provide standard RJ45 connection technology for the industrial field level.



02. PushPull CONNECTORS

HARTING has set the standard for connection technology for innovative IP 65 / IP 67 installation concepts with its new generation of the PushPull series. The multifunctional PushPull connector is available for data, signal and power applications and provides a concept with many connector mating faces. The universal PushPull product line is complemented by additional interfaces such as USB, LC or SCRJ.



03. CIRCULAR CONNECTORS

HARTING offers a comprehensive portfolio of M8, M12, M23, 7/8" and Han-Max® circular connectors for industrial applications. In addition to assembled system cables, HARTING also offers connectors with HARAX® fast termination technology for onsite installation directly in the field.

Power

Signal



04. INDUSTRIAL CONNECTORS Han®

Han® industrial connectors with degree of protection IP 65 / IP 67 represent the worldwide connector standard with regard to safe installation, efficient commissioning and servicing of machines and plants

Data



05. D-SUB CONNECTORS

D-Sub connectors are a classic solution for cable-to-board applications. Thanks to their versatility, they represent a universal solution for applications in the field of device connectivity, and offer a wide range of data, signal and power connection technology for applications in automation systems.



06. har-mik® INTERFACE CONNECTORS

Miniature D connectors are used for applications where the focus is set on space saving solutions and high data rates. HARTING offers 14-pole to 100-pole har-mik® connector variants with pin & socket and bellows contact design and 1.27 mm contact grid, covering data rates up to 600 MHz.

