Amphenol Provides Automation and Robotics Market with Rugged Interconnect Solutions for the Most Demanding Environments

Connectors are designed to excel in both performance and reliability

Technical Specifications

• Amphenol Industrial Operations (AIO) offers power connectors, including the Micro-B™, Amphe-PD™ and LPT.

• Amphenol LTW offers a variety of waterproof connectors that meet harsh environment specifications. These connectors include the largest range of M series, such as M12 S/T/X/M/Y/L/E/F codes, M12/M8 SMT types and M12 X-code. The division also offers the RJ45 Cat.6A adapter, USB 3.1 Type-C and distribution boxes.

• Amphenol Sine/Tuchel offers connectors for machine applications, including the C16-3, C091, heavy|mate® C146 series, M23 Elite Series, PowerBosslite™ M22 and PowerBosslite™ M35.

• Amphenol PCD Shenzhen offers two products for power and signal applications, including the Xcel power|mate® and industrial terminal block.

• Amphenol TPI offers RoboLok™, a three position, high current primary circuit connector and cable protection system.

• Amphenol GEC offers a total Cable Protection System for use in any type of automation application.
• Amphenol Anytek offers four pluggable series terminal blocks, including the OQ series, TJ series, KD series and the KE series.

Sidney, N.Y. March 2018 – Amphenol Industrial Products Group, a global leader in interconnect systems, offers a wide variety of circular connectors, terminal blocks, motion grade connectors, flexible circuits, cable assemblies as well as total box build solutions for the automation and robotics market. The company’s interconnect solutions are designed to excel in both performance and reliability in the most demanding environments. Amphenol has a connector for every automation and robotics application.

Amphenol's automation and robotics products, distributed by various divisions of the company, are designed for automotive OEM, auto tiers, electronics, consumer packaged goods, plastics and rubber, as well as metals, logistics, medical and recycling and waste applications. They can withstand vibration, salt spray, humidity, dust, EMI/EMC and temperature extremes.

Amphenol Industrial Operations (AIO) offers power connectors
Amphenol Industrial Operations offers power connectors, including the Micro-B™, Amphe-PD™ and LPT.

The Micro-B™ were developed for industrial applications where electrical performance must be met with affordability. High mating cycles along with excellent shell to shell electrical bonding for EMI are the benchmark of rugged connectors.
AIO offers a series of RADSOK enabled power connectors that are a cost-effective solution for high current interconnect requirements. The versatile Amphe-PD™ is available in a multitude of configurations for high flex cable, PCB and busbar mounting.

The LPT series from AIO is a metal connector that can be used for all major global signal application markets. The versatile and cost-effective 26482 Series I connector is for both power and signal applications.

**Amphenol LTW (ALTW) connectors for harsh environments**
Amphenol LTW (ALTW), a division of Amphenol Industrial Products Group, offers a variety of connectors with the most comprehensive range in M series, such as M12 A,B,D,X,S,T code with upcoming L,K,I,M,Y,L,E,F. The series is available in M12 push-pull reverse compatible.

M12 receptacles are available in PCB straight and right angle, solder and solder with pigtail and SMT. Field Installable variants are available in solder, screw-in, push-in and IDC terminals. Overmolded with PVC or PUR jacket cables are offered in straight and right angle. M8/G8, M10.5, M23 connectors are available with the upcoming M5. A wide range of accessories are available from T, Y, adapter, cap as well as distribution box to terminator for all automation and robotics applications.

The USB 3.1 Type-C provides a cost-effective and reliable fast data transfer. This compact, reversible plug supports transfers up to 5 (Gbps) and supplies power at 5A max current. Backwards compatibility, waterproof and assembly-type design O-ring ensures a smooth mating process. For Ethernet applications, ALTW provides a wide range of waterproof RJ connectors in screw and lock type.
The FLO series product range, includes panel, field installable, overmolded with cables metal push-pull connectors. ALTW offers customization and flexibility to meet the needs of different segments for industrial control. These durable and reliable push-pull connectors can operate in temperatures ranging from -55°C to 250°C.

**Interconnects for machine applications**

Amphenol Sine/Tuchel offers low cost interconnect systems for machine applications that combine power and signal into one connector. This series includes the C16-3, C091, heavy|mate® C146 series, M23 Elite Series, MiniBoss M22 and PowerBosslite M35.

The C16-3 is ideal for harsh environments like motor connections with no, or low, shielding requirements and features multiple mechanical coding options that allow the use of same connectors beside each other.

Amphenol’s C091 connectors are used in the areas of automation, test measurement and control, medical, sensors and telecommunications. Available with either a screw or bayonet locking system, these connectors are perfect for signal transmission requirements.

The heavy|mate® C146 series is designed for applications in harsh industrial environments. This heavy duty connector’s stamped contact allows for cost-effective wiring. They are extremely flexible, offering two parallel modular systems that enable signal, power, pneumatic, coax and Ethernet connections in one connector in an individual customized arrangement.
Amphenol Sine/Tuchel offers PowerBOSSlite™ M22 and PowerBOSSlite™ M35 cable assemblies. These plug and play assemblies are available with 3 and 4 position inserts and a variety of standard lengths.

**Amphenol PCD Shenzhen**

Amphenol PCD Shenzhen, a division of Amphenol, offers two products in the robotics and automation markets, including the Xcel power|mate®, that features a sliding ring that is sprung mechanically into a locked position. It can be used in factory automation and power distribution applications for quick push-pull mating and unmating power.

The division also offers industrial custom terminal blocks that feature a broad range of fixed-mount and pluggable European cage clamp, US-style screw clamp and spring clamp style wire-to-board and wire-to-wire blocks and related headers.

**Amphenol TPI**

TPI, another division of Amphenol Industrial Products Group, offers RoboLok™. RoboLok™ is a three position, high current primary circuit connector ideal for use with primary circuit of automotive welding robots, robotic accessory packs, as well as primary circuit of high current industrial equipment. This compact connector performs well in harsh environments and can reach up to 240A continuous with 60K T-Rise. It delivers superior performance over a broad range of wire gages.

**Amphenol GEC**
Offers a broad cable protection system that includes various conduit series and cable glands that are ideal for factory automation. This system provides both superior and effective protection for a broad range of equipment in a cost-effective manner.

**Amphenol Anytek**

Amphenol Anytek, a division of Amphenol Industrial Products Group, offers four pluggable series terminal blocks used in applications like server control, machine display panel and monitoring systems that have a lot of vibration. The four different series, including OQ series, TJ series, KD series and the KE series are easy to use and are UL, VDE and TUV certified.

**PHOTO CAPTION:** Amphenol interconnect solutions are designed to excel in both performance and reliability. The company has a connector for every automation and robotics application there is.

Follow us: [https://twitter.com/AmphenolAIO](https://twitter.com/AmphenolAIO)
Get our updates: [https://www.linkedin.com/company/amphenol-industrial](https://www.linkedin.com/company/amphenol-industrial)

**UPCOMING TRADESHOW:** CIPPE New China International Exhibition Center, Beijing, China, 3/27-29; Prolight & Sound, Exhibition Frankfurt, Frankfurt, Germany, 4/10-13; OTC, NRG Park Houston, Houston, TX, 4/30-5/3; EWEA, McCormick Place, Chicago, IL, 5/7-10

**READER SERVICE INQUIRIES:** Please forward all reader service inquiries to Martin Hartman at Amphenol Industrial Products Group, Amphenol Corporation, 40-60 Delaware Ave, Sidney, N.Y., 13838-1395; e-mail: mhartman@amphenol-aio.com; Web: [www.amphenol-industrial.com](http://www.amphenol-industrial.com).

**EDITOR’S NOTE:** Amphenol Industrial Products Group, headquartered in a 307,000 square foot facility in Sidney, N.Y., provides a full range of high reliability power/signal connectors and interconnection systems specifically for the industrial markets including
rail/mass transit, process control, automotive manufacturing, heavy equipment, wireless base stations and petrochemical/power generation.

Products include ruggedized-for-industry cylindrical, fiber optic, rectangular, and industrialized versions of Amphenol’s MIL-DTL-5015 cylindrical, MIL-DTL-26482 miniature cylindrical and GT reverse bayonet cylindrical connectors. It employs more than 900 people and is ISO9001, TS96949 and MIL-STD-790 certified.

Amphenol Industrial Products Group is a division of Amphenol Corporation, Wallingford, CT, one of the largest manufacturers of interconnect products in the world, with year 2017 sales topping $7 billion.