



Breakthrough technology makes connectivity EASY – easy mating, easy cleaning, easy integration – with brand-new Fischer Freedom™ Series

Saint-Prex, 11 June 2018 – Fischer Connectors, the global connectivity solution provider of high-performance circular connector and cable assemblies, continues to push the boundaries of technological innovation in rugged miniaturization, high-speed data transmission, sealing, and wearability.

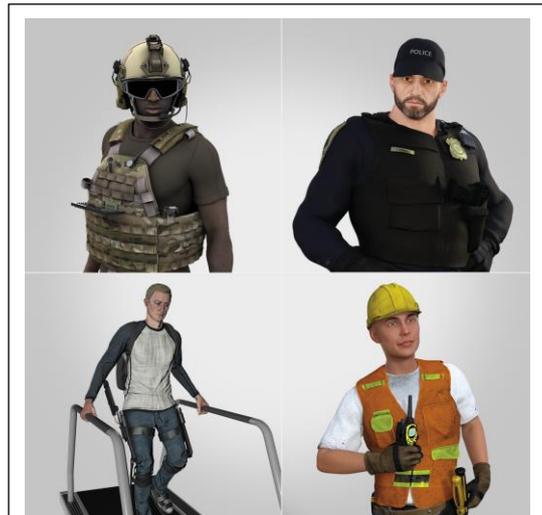
Committed to making its customers' lives easier, on 11th June 2018 Fischer Connectors is launching a breakthrough **plug & use** connectivity technology with its new product line: the Fischer Freedom™ Series and its first product: the Fischer LP360™.

The Fischer Freedom™ Series revolutionizes **wearable connectivity**, as it meets design engineers' urgent needs for designing and connecting portable and body-worn applications quickly and easily, thanks to **three breakthrough technology innovations**:

- **Mating** – no key code allows for 360° mating “freedom”
- **Locking** – ball-locking mechanism with sealing and variable pre-defined force (patent pending)
- **Materials** – specially designed pins on the plug are IP68 sealed with a membrane (patent pending)

Thanks to these innovations, the Fischer Freedom™ Series **facilitates integration, maximizes usability** and **optimizes cable management** for a wide variety of applications within markets such as defense, security, medical, industrial and civil engineering – to name just a few.

“Our core mission at Fischer Connectors is to make our customers' lives easier with a collaborative approach and tailored connectivity solutions,” says Jonathan Brossard, Fischer Connectors Group's CEO. *“The creation of the Fischer Freedom™ Series is evidence that our mission actually strengthens our customers' abilities to design for their markets. Reimagining connectivity like we've shown in the new Fischer Freedom™ Series allows those customers to turn their ambitious ideas into solutions that fit their world and help them break into new markets as well.”*



The Fischer Freedom™ Series is ideal for a wide variety of portable and body-worn applications within markets such as defense, security, medical, industrial and civil engineering.

Threefold usability

The new Fischer Freedom™ Series and the Fischer LP360™ set a **new standard in usability**, which is threefold.

The new product line makes end users' lives easier **by reducing cognitive, weight and reliability burdens** thanks to:

1. **Easy mating.** Mating the Fischer LP360™ becomes as intuitive as buttoning up a vest – without compromising on the high-performance reliability required in harsh environments.
2. **Easy cleaning.** The new connector is fully cleanable (both plug and receptacle), and is easy to use and maintain with a faster set up and improved durability.

The Fischer Freedom™ Series also makes the life of design engineers easier, as it meets their need to easily and seamlessly integrate connectors – with or without cables – into multifunctional portable or body-worn devices.

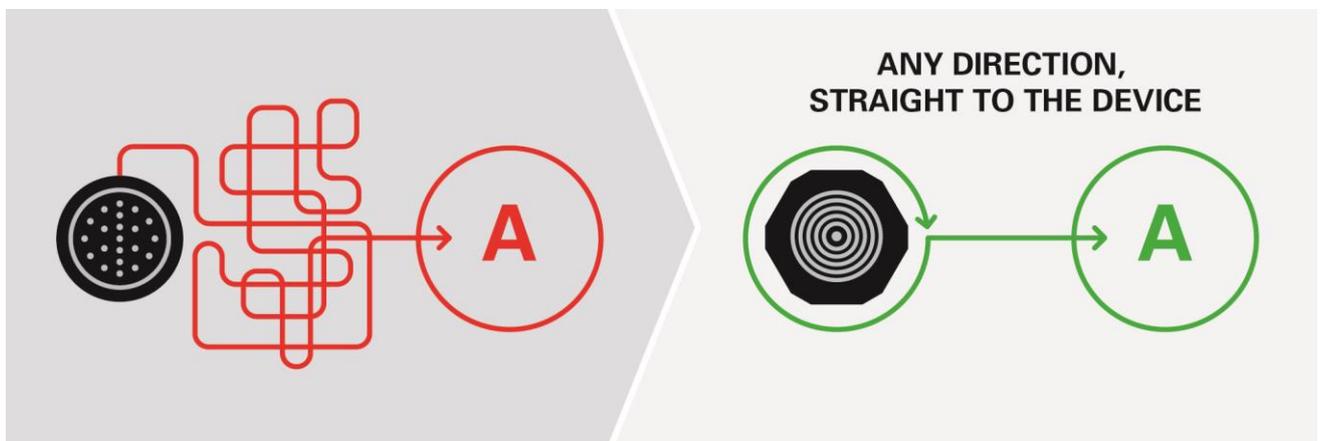
3. **Easy integration.** Thanks to its compact and low-profile design, the Fischer LP360™ is easy to integrate into clothing with devices and subsystems; via the panel-mounted plug interface, cables can even be removed completely, and the connector can be directly integrated into the housing of such devices as a camera, a sensor, a light, a GPS.

Optimized cable management

The Fischer Freedom™ Series **optimizes cable management with an extremely reliable connectivity ecosystem.**

As the Fischer LP360™ has no key code, it offers 360° mating “freedom”, meaning it can be plugged and routed in any direction, ensuring that the cable can always go straight to the device. **No more twists and turns** means shorter cables in the equipment body-worn by dismantled soldiers, healthcare professionals or patients, civil engineers, surveyors and operators, and law enforcement officers and security guards.

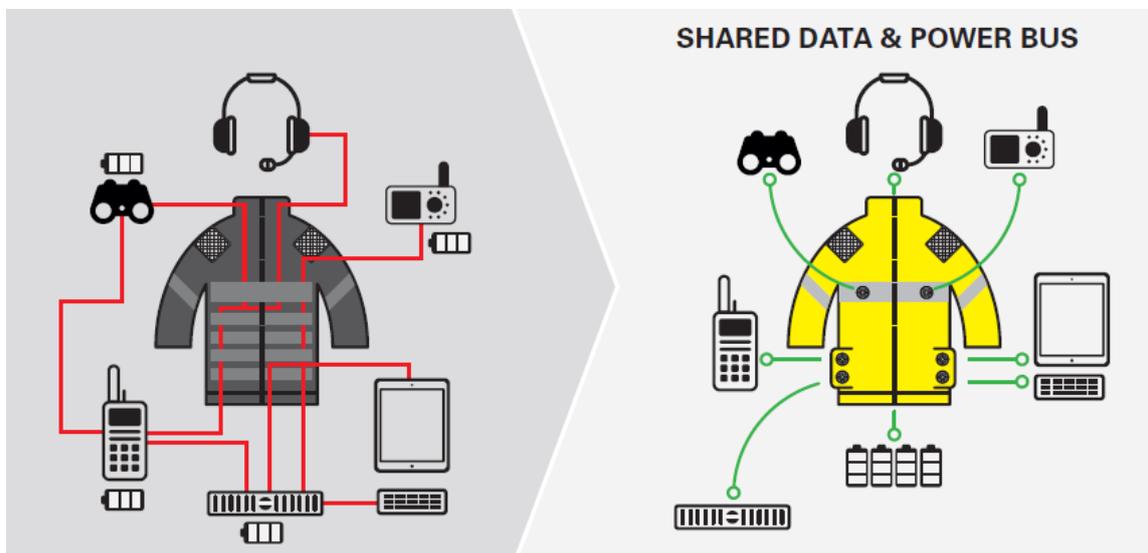
In certain applications, the need for cable can be eliminated completely (*cf. point 3 above*).



Shared data and power bus opens up new opportunities in smart clothing and IoT

The usability as well as the integrability of the Fischer Freedom™ Series connectivity solutions contribute to **making wearable devices smaller, faster and smarter** – and, ultimately, to making high-performance and smart clothing a reality.

The Fischer Freedom™ Series enables design engineers to build **an intelligent vest which works as a hub** with multiple portable and body-worn devices connected to a shared data and power bus. Clutter is reduced and usability increased, making equipment lighter and faster to set up. These benefits also open up further opportunities in the Internet of Things (IoT).



Wim Vanheertum, Director of Product Management at Fischer Connectors, explains: *"The Fischer Freedom™ Series offers a unique connectivity solution that has been thought of and designed entirely from the outset for the benefit of our customers. It fulfills in a unique way the need for usability and easy integration that our customers, the design engineers, constantly express – and also our customers' customers: those who use the applications they have designed. Our breakthrough lightweight, compact, extremely reliable and intuitive solution is easy to integrate into applications operating in diverse and challenging environments, including portable and wearable electronic ecosystems delivering power and data with optimized cabling: the cable can always go in a straight line to the device, without any twists, turns and tangles. In certain applications, the need for cable can be eliminated completely when the plug is integrated directly into the housing of devices such as a camera, a sensor, a light, or a GPS. It offers, in that sense, the "wireless (cable-free) without the hassle of the wireless" and thus paves the way for further expansion into breakthrough connectivity solutions for the Internet of Things (IoT)." Vanheertum concludes: "The creation of a brand-new product line with breakthrough connectivity technology at its heart, as embodied by the Fischer Freedom™ Series, isn't something that happens every day. It's an exceptional honor for me to have managed this product development and to plan the future expansion of this new product line."*

MAIN FEATURES AND BENEFITS



The low-profile, rugged and versatile Fischer LP360™ is the first product in the Fischer Freedom™ Series:

- **Signal & power through 7 contacts, up to 24AWG compatible with up to 3x 5A power and 4x 1A signal with USB 2.0 and Ethernet data protocols**
 - **Receptacle:** Panel mount with O-ring sealing, or integration as a wearable solution
 - **Plug:** Easy cabling (up to 24AWG), with or without potting – bend relief or overmolding – panel plug version for direct integration into the housing of an application
- **High-performance reliability**
 - Robust stainless steel & brass design for longevity (min. 10,000 mating cycles)
 - Resistant to shock, vibration, torque and extreme temperatures
 - Tested in line with MIL and IEC standards

 <p>Easy mating</p> <ul style="list-style-type: none"> ▪ No key code: 360° mating freedom & optimized cable management ▪ Blind-mate, non-magnetic ball locking with variable force (patent pending) ▪ Emergency release unlocking – no latching 	 <p>Easy cleaning</p> <ul style="list-style-type: none"> ▪ Membrane-sealed contacts (patent pending) ▪ Surface contacts (no female cavity or protruding male contacts) ▪ IP68 sealed to -20m/24h 	 <p>Easy integration</p> <ul style="list-style-type: none"> ▪ Low profile, right-angled plug ▪ (Receptacle) Wearable integration OR panel mounted ▪ (Plug) Easy cable assembly OR direct integration into the device's housing
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Trend Paper on wearable technologies

To mark the launch of the Fischer Freedom™ Series, Fischer Connectors has published a Trend Paper authored by Research & Innovation Manager Jean-Marie Buchilly. The world is on the cusp of an explosion in wearable technologies – a new category that will revolutionize B2C and B2B markets. This paper gives an overview of current trends in wearable technologies, and dives deeper into emerging applications in diverse markets with a special focus on B2B applications: healthcare, industry, robotics, defense and sport. It presents exciting examples of how wearables are impacting users' and designers' lives – improving health and safety, convenience and performance, with connectivity playing a crucial role.



More information

- Fischer Freedom™ Series: www.fischerconnectors.com/freedom
- Trend paper:
 - *Emerging Trends in Wearable Technology Across Several Markets* – <https://www.fischerconnectors.com/global/en/connectivity-solutions-wearable-technologies>
- Fischer Connectors' website: www.fischerconnectors.com
- How to contact us: www.fischerconnectors.com/global/en/contact-us

Fischer Connectors' **press release with HD images and related documents** can be found [here \(Dropbox\)](#).

About Fischer Connectors

A pioneer in high-reliability and rugged connector technology, Fischer Connectors has kept the spirit of innovation alive for more than 60 years. Since 1954, it has been reimagining connectivity, turning its customers' challenges into success stories through breakthrough technologies, high-quality products and highly responsive customer service.

Fischer Connectors helps its customers around the world produce innovative and reliable applications by designing, manufacturing and distributing high-performance, rugged connectivity solutions that withstand the most demanding environments. Its high-quality solutions are particularly suited to applications requiring faultless precision, durability and resistance to extreme conditions, including defense and security, medical, industrial, instrumentation, audiovisual, transportation, and energy.

Headquartered in Saint-Prex, Switzerland (Canton of Vaud), where its R&D Center and manufacturing facilities are also located, the Fischer Connectors Group has cable assembly sites in EMEA, the United States and Asia. The Group also includes local subsidiaries and a wide network of distributors and agents all over the world.

www.fischerconnectors.com

