



## TECHNICAL ARTICLE

X-TEC 15 and W-TEC 15 impress with maximum performance and minimum size

### M15 Power - Simply impressive

*Besigheim, June 2016* - The Besigheim-based company LQ Mechatronik Systeme GmbH is setting new standards with the X-TEC 15 and W-TEC 15. The mechatronic experts provide a unique solution in the 400-volt range through a combination of circular plug-in connectors with power cables, which impresses thanks to the very compact design, superb performance, higher current density and universal suitability.

With a compact overall diameter of just 15 millimetres these plug-in connectors and power cables open up numerous applications for manufacturers of machines, units and conveyor systems. When compared to 7/8-inch connectors and cables, X-TEC 15 and W-TEC 15 are smaller and more powerful. Instead of just nine amps, the performance for continuous operation is 16 amps at the power contacts, with the ancillary contacts receiving a supply of ten amps. This outstanding power with such small dimensions is unique on the market to date.

#### **X-TEC 15: versatile and functional**

The basic principle of the X-TEC series is that it is modular and it allows all the necessary cable variants to be fitted together from the same basic components, irrespective of the manufacturer. The compact, round form also allows all possible connection options. Assembly is also simple because of the integrated cable glands. It is also possible to



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save costs, as the plugging cycle is designed for high loads. The connectors can be reused, if wear is minimal.

The new plug-in connectors can power motors of up to 5.5 kilowatts. Special quick-release fasteners also provide a high-level of safety. The plug-in connector is securely locked by turning the fastening element through less than 90 degrees. An anti-vibration mechanism also prevents the connector from being disconnected when shaken. X-TEC 15 can be provided with a flange or screw thread. It is designed for convenient fitting at different angles using the cap-rail adapter, which has been specially developed for this range, so that it is suitable to use for nearly all applications.

This plug-in connector, combined with the W-TEC 15 power cable, is a solution that makes a significant contribution to reducing costs.

### **W-TEC 15: High power with small dimensions**

This power cable for the X-TEC 15 has six 2.5 mm cores, supplying rated current of 16 amps to the three power contacts and 10 amps to the two ancillary contacts during continuous operation. A fully automated manufacturing process produces moulded plug-in connectors, thus providing a high level of protection against dust and liquids as well as a tamperproof facility. The assembled, unshielded power cable is available with connectors at one or both ends. This greatly simplifies the complexity and variance of cable assembly. Furthermore, this reduces the weight of the W-TEC 15, which favours its use in energy cable carriers.



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Photographic material (can be reproduced free of charge if LQ Mechatronik-Systeme GmbH is acknowledged as the source):

 A black asynchronous motor with a fan-cooled front and a cable connected to an M15 Power connector.	<p>Application illustrating the M15 Power: Asynchronous motor up to 7.5kW</p>
 Four small images showing different configurations of M15 Power connectors and cables: a cable with a plug, a cable with a different plug, a plug and a socket, and another plug and socket configuration.	<p>M15 Power, a combination of the X-TEC 15 plug-in connector and the W-TEC 15 power cable</p>



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### **About LQ Mechatronik-Systeme GmbH**

LQ Mechatronik-Systeme GmbH, a medium-sized company from Besigheim, is a successful systems and product supplier of comprehensive electromechanical solutions for control and installation applications. Whether for modular control cabinets or cable drag chains – mechatronic experts focus on the reduction of complexity. LQ takes a modular principle with standardised interfaces as a basis for combining individual components to form compact functional units or installation-ready systems, thus supplying mechanical and plant process engineering companies with complete electromechanical units. The company employs 250 employees on three continents. Apart from its headquarters in Germany, the LQ GROUP has branches in Switzerland, the USA and China.

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