

LAPP expands its portfolio of EPIC® POWER M12 connectors

Make way for the EPIC® Minis!

Stuttgart, 24 April 2023 – LAPP's smallest power connector has acquired a new addition to its family. At its spring 2023 launch, the global market leader for integrated solutions in the field of cable and connection technology will be presenting its new circular connector EPIC® POWER M12 K. The LAPP portfolio of mini-power connectors has thereby been enlarged.

The trend towards miniaturisation doesn't stop at connectors however. In many areas of industry, applications are becoming smaller and smaller, while power density is increasing. Connectors are also obliged to follow this trend. In automation technology in particular, both faultless transmission of data and reliable supply of power to individual components are sensitive issues. PROFINET places its full trust in the standardised M12 L connector. EPIC® POWER M12 connectors from LAPP are the logical answer to this market requirement.

The new EPIC® POWER M12 K for conductor cross-sections of 0.75 to 2.5 mm² is primarily suitable for connecting three-phase motors of up to 7.5 kW or for supplying power to devices and machines in a wide range of applications. It also guarantees optimum electromagnetic compatibility and can withstand high environmental and mechanical loads. And besides this it has ample power! The mini power connector of the M12 K series is suitable for power transmission of up to 630V/12A. The mechanical K coding of the connector face prevents it being plugged incorrectly into the mating connector. And in connected state, it can attain protection class IP 65, IP 67 and IP 69.

EPIC® POWER M12 L connector up to 16 A

The EPIC® POWER M12 K is the logical addition to the new EPIC® POWER M12 L connector, which has been developed for power transmission of up to 60V/16A. Use in I/O modules for PROFINET is an important field of application for the EPIC® POWER M12 L connector. To date, 7/8" connectors have been the standard power interface for the sensor/actuator distributors. The change from the old standard to the M12L enables boxes to be reduced in size by over 50%. The PNO has defined the L-coded M12 as the interface for the power supply for all PROFINET applications. This is the set standard for PROFINET devices such as intelligent motors or I/O modules. M12 L coding offers the ideal prerequisites for this.

During development, the technical properties of the smallest connectors were simulated based on virtual models. The two M12 K series for energy transmission up to 630V/12A and M12L up to 60V/16A were put through their paces virtually in this way before the first 3D-printed model was produced. This means that the limit of power transmission with increasingly smaller connectors was first evaluated virtually and then transferred to initial prototypes and series production. "The previous M12 connectors were already developed very close to the limits of feasibility. We have now checked all factors once again to achieve the best results. This would barely have been possible without the virtual design," stressed Steffen Schneider, Product Manager at U.I. Lapp GmbH. The unbeatable results of the EPIC® Minis are significantly smaller sizes and improved power transmission.

Images and graphics

For this press release, you will be provided with digital images in printable resolution. The images may be used free-of-charge. No graphical editing is permitted, with the exception of extracting the main image.



EPIC® POWER M 12K 4A

Small and powerful: the new EPIC®
POWER M 12K 4A circular connector

Photo: LAPP

You can download the image [here](#).

Press contact

Ann-Kathrin Hoffmann
Marketing Communications
Telefon: +49 711 78385702
ann-kathrin.hoffmann@lapp.com

Irmgard Nille
IN-Press
mobile: +49 160 97346822
irmgard.nille@in-press.de

U.I. Lapp GmbH
Schulze-Delitzsch-Str. 25
DE-70565 Stuttgart

About LAPP:

Headquartered in Stuttgart, Germany, LAPP is a leading supplier of integrated solutions and branded products in the field of cable and connection technology. The company's portfolio includes standard and highly flexible cables, industrial connectors and screw technology, customised system solutions, automation technology and robotics solutions for the intelligent factory of the future, as well as technical accessories. LAPP's core market is in the industrial machinery and plant engineering sector. Other key markets are in the food industry, logistics, as well as the energy and the mobility sector.

The company was founded in 1959 and is still fully owned by the founding family to this day. In the 2021/22 financial year, it generated a consolidated turnover of EUR 1,864 million. LAPP (including its non-consolidated companies) currently employs approximately 5,055 people across the world, produces at 19 international sites and has over 41 sales companies. LAPP also cooperates with around 100 international offices.

You can find more information on this topic here:

<https://www.lapp.com/en/de/news/presse/e/000143>

Follow LAPP:

