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## News Release

# Connectivity Technology by Belden Already Meets Future PROFINET Standard for 24-Volt Power Supply

## New L-coded M12 Power Connectors Stand Out with their Compact Design, High Current-Carrying Capacity and Connectability to Functional Ground

**St. Louis, Missouri - October 27, 2016** - Belden Inc., a global leader in signal transmission solutions for mission-critical applications, has developed Lumberg Automation M12 Power Connectors as an economical solution for power transmission in harsh environments.

At its technical strategy meeting this September, PROFINET International (PI) decided that the L-coded variant, which is internationally standardized through the standard 61076-2-111, will be the future single standard for 24-volt PROFINET devices with round connectors. The key factors behind this decision were compact design and its high current-carrying capacity (16A) at a conductor cross section of 1.5 mm<sup>2</sup>.

In addition, L-coded M12 Power Connectors for PROFINET devices in a TN-S system can be connected via the fifth contact for the functional ground to a Common Bonding Network (CBN), a meshed grounding concept in accordance with DIN EN 50310.

In the current PROFINET guideline "PROFINET Cabling and Interconnection Technology," two round connectors with screw connections are specified for the 24-volt power supply in addition to a push-pull rectangular connector. This is an A-coded M12 connector for power class 1 to 4 A; the version with a 7/8" connection is for power class 2 to 16 A.

"In the future PROFINET guideline, which is expected to be published in April 2017, these two variants will be replaced by the L-coded M12-Power Connectors," explains Uwe Widmann, responsible for standardization and technology at Belden, Germany.

"This connection technology is more powerful and is almost 50 percent smaller than other comparable power connectors. This miniaturization has also been applied to PROFINET devices, so future PROFINET networks can be built more flexibly and efficiently."

The L-coded M12 Power Connectors of the Lumberg Automation brand are approved in accordance with UL and VDE, and are offered in both straight and angled versions, as well as molded, for customer assembly or as an installation variant. They have an extended operating temperature range of -40°C to +125°C and are available with protection classes IP65, IP67 or IP69K. The five-pin versions with functional ground are clearly recognizable by a gray cable jacket and gray contact carriers for pins and sockets.

**For more information on the Lumberg Automation L-coded M12 Power Connectors, visit: [www.lumberg-automation.com/en/Lumberg\\_Automation/news/m12-power-connectors/index.phtml](http://www.lumberg-automation.com/en/Lumberg_Automation/news/m12-power-connectors/index.phtml).**

In a world moving toward new levels of interoperability made possible by the [Industrial Internet of Things \(IIoT\)](#), visibility is vital to operators as they face increasing demands to receive, analyze and share data. Belden's industrial connectivity solutions address these needs head on. With more connected machines, rising data volumes and increasing productivity demands, customers can count on Belden cable and Lumberg Automation and Hirschmann industrial connectors for a complete communications infrastructure designed to last. Belden's customized systems provide high levels of performance and reliability to help a wide range of industrial automation applications handle the growth of intelligent, networked devices and robust analytics. Visit [www.lumberg-automationusa.com](http://www.lumberg-automationusa.com) to learn more.

### **About Belden**

Belden Inc., a global leader in high quality, end-to-end signal transmission solutions, delivers a comprehensive product portfolio designed to meet the mission-critical network infrastructure needs of industrial, enterprise and broadcast markets. With innovative solutions targeted at reliable and secure transmission of rapidly growing amounts of data, audio and video needed for today's applications, Belden is at the center of the global transformation to a connected world. Founded in 1902, the company is headquartered in St. Louis and has manufacturing capabilities in North and South America, Europe and Asia. For more information, visit us at [www.belden.com](http://www.belden.com); follow us on Twitter: [@BeldenInc](https://twitter.com/BeldenInc).

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Connectivity technology by Belden already meets the future PROFINET standard for 24-volt power supply. (Photo: Belden, PR430)

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