

PRESS RELEASE

Safe connections with SafetyBus

Robust, durable cabling assures safe connectivity within Safety-BUS-p networks

Oer-Erkenschwick, Germany, in April 2005 - For any kind of traffic, safe arrival is a key requirement! This also applies to data traffic in SafetyBUS p networks designed for reliable real-time exchange of highly sensitive I/O-data between a wide range of different bus components. With extremely robust network cabling and easy-to-install hybrid cables, cablemaker Ernst & Engbring (E&E) provides maximum reliability to installations of SafetyBUS p systems, which over the last five years has become the leading standard for safety-oriented networks used in sophisticated machinery and production facilities.

"The weakest link determines the strength of a chain," underlines Lothar Klick, managing director of E&E. "That's why electro-mechanical components for the Safety-BUS p have to be selected with extreme care." Specifications and approvals are reviewed and granted by the SafetyBUS club, an organization aimed at setting and improving standards for the safety-related bus system. To play it safe, certified SafetyBUS p cables have been improved significantly over standard network cabling. They are well equipped to withstand severe threats like electromagnetic interference (EMI) - a key requirement for SafetyBUS cabling used on long runs extending up to 3,500 m and connecting up to 64 subscribers within a single network. They come with industrial grade properties to shoulder challenging or even hazardous environments like high temperatures or chemical attacks from solvent and lubricant contact. All SafetyBUS p cables provided by E&E have undergone rigid qualification testing against these environmental stress factors and have been awarded certification by the SafetyBUS club.

The SafetyBUS p data cables offered by E&E feature three increased-diameter conductors with a longitudinal resistance of <26 Ohm/km - ideally suited for long cable runs. These robust conductors provide for low signal loss and extended reach. Low friction wrapping tapes are used to provide for smooth and hassle-free operations. SafetyBUS p cables are shielded for optimum EMI performance. Heavy-duty cable jackets provide the best mechanical protection possible: SafetyBUS p cables are jacketed with a halogen-free, oil-resistant special polyurethane based compound (TMPU, acc. to VDE 0282T10). The outer jacket is absolutely silicone-free and fully compatible with paint spray applications in automotive and other areas.

Hybrid cabling is one of the best means to reduce the number of cables necessary in a system - and helps to increase reliability. Data and power cables must no longer be laid and connected separately. Instead, they are integrated in one single round cable providing the user with substantial cost advantages. E&E has made these potentials accessible to SafetyBUS p installations.

In close partnership with the SafetyBUS p club and individual companies, the cablemaker has developed a dedicated hybrid cable integrating power and data lines. The certified cable comes with a customized hybrid IP65/67 gateway connector, which was developed by partner Harting. Designed for applications in decentralized networks, the industrial grade, high-endurance hybrid cables allow for easy attachment of I/O modules deployed in the field - without interrupting data and/or power supply to other SafetyBUS p participants.

The SafetyBUS p hybrid cable allows for attachment of active components such as limit switches and safety controllers with up to 400 W power consumption (16 A@24 V DC). Integrating the power lines into the round cable required an upgrade of the shielding applied to the three data lines: the shield was improved to foil under braid. The low transfer impedance shielding effectively suppresses all kinds of EMI, i.e. from DC/DC converters. The E&E hybrid cables also sport a tough and strong TPU outer jacketing. They are available in bulk or as assemblies - ready to plug in. All SafetyBUS p cables from E&E come with UL approval - making them ideal candidates for exports to overseas markets.

All data and hybrid cables for the Safety-BUS p are manufactured at the E&E plant in Oer-Erkenschwick, Germany, with state-of-the-art production equipment. E&E builds cables from 0.1 to 100 mm diameter, some of them in clean-room production facilities. Since 1999, E&E is part of the Dutch Twentsche Group/ TKH (revenue 2004: 460 million EUR; 2,541 employees). Germany-based E&E has a staff of 260 employees. Since its start in 1952, E&E has developed, manufactured and marketed more than 10,000 customized cable products for a wide range of industries and applications.

For further information:

Heidmarie Bahl
Public Relations
Ernst & Engbring GmbH & Co. KG
Industriestrasse 9
D-45739 Oer-Erkenschwick
Phone: 49-(0)2368-690117
Email: bahl@eue-kabel.de

Martin Wendland
PR Toolbox
Toronto/ Canada
Phone: 001-416-830-8797
Email: mwendland@pr-toolbox.com

