

# We Go to Extremes to Make Every Connection Count.

Industrial & Commercial Transportation



# We Go to Extremes to Make Every Connection Count.

When every connection counts, TE Connectivity delivers reliable connectivity products designed to withstand harsh environmental conditions for on and off-highway vehicles and recreational transportation. As a world leader in rough and rugged connectivity, you can depend on TE Connectivity to provide innovative solutions for field applications where failure is not an option.

#### **Experts in the toughest jobs**

The Industrial and Commercial Transportation business unit of TE Connectivity is a world leader in connectors and interconnect systems for use in the toughest and harshest environments. From trucks to tractors, from motorcycles to recreational vehicles, we offer products that work just as hard as the vehicles in which they are installed. Our intelligent yet robust solutions and technologies function reliably in applications with high vibration and extreme temperature characteristics.

The new business unit combines the service portfolios of DEUTSCH and TE Connectivity under one roof. The DEUTSCH brand is a global leader in interconnect solutions for use in heavy equipment and harsh industrial environments. TE Connectivity has been among the world leaders in interconnect systems for automotive and system manufacturers for over 50 years.

We offer you one of the world's most comprehensive connector product portfolios. Thanks to the breadth of our product range, our global presence and our innovative strength, we are able to develop targeted solutions for the most demanding requirements of a rapidly changing market.

We engineer tough products for your application needs.

We know that dependability is a must in the field or at the site. That's why our engineers designed rugged, high vibration resistant connector solutions to meet your application requirements.

Industrial and Commercial Markets include:

**ON-HIGHWAY VEHICLES** 



These include trucks (class 6-8, and utility), buses (city buses, coaches, school buses) and emergency vehicles.



#### **OFF-HIGHWAY VEHICLES**



## RECREATIONAL TRANSPORTATION



In this segment, we equip construction vehicles such as front-loaders, dump trucks, excavators and bulldozers. In agriculture vehicles, our products are widely used in tractors and combine harvesters, for example. This segment also includes special vehicles like industrial lifts or material handling vehicles.

From boats (including personal watercraft) to motorcycles, scooters, snowmobiles, ATVs and recreational vehicles, the range of recreational vehicles is broad. Whatever the application, we have a connector to match.

# Dependable performance and reliability

Industrial & Commercial Transportation has the ideal product series for every harsh environment. Our time-tested, high vibration resistant products and technologies provide the right solution for your applications and requirements.









#### **LEAVYSEAL**

LEAVYSEAL connectors are designed for harsh conditions. They are a completely sealed series which combines the advantages of AMP MCP connector contacts with a robust design and easy connection of multi-position plugs.

#### **HEAVY-DUTY SEALED CONNECTOR SERIES (HDSCS)**

The heavy-duty sealed connector series (HDSCS) wire-to-wire and wire-to-device connectors are designed for use in electronic and electrical vehicle applications where high vibration and long-term mechanical stress can occur.



#### **AMPSEAL 16**

The AMPSEAL 16 wire-to-wire and wire-to-device connectors were designed to meet the rigorous demands of off-road, heavy-duty industrial, recreational and agricultural applications, using industry standard size 16 wire contacts.

#### **DT FAMILY**

The DEUTSCH DT, DTM, and DTP series environmentally sealed connectors are designed specifically for cable-to-cable applications. The DT connectors are used in harsh environment applications where even a small degradation in connection may be critical.

#### **DRC SERIES**

The environmentally sealed DEUTSCH DRC series is a rectangular connector series that offers insert arrangements from 24 to 80 cavities and accepts size 12, 16 and 20 contacts. Several mounting options are available including in-line, flange mount and PCB mount.

#### **HD30 & HDP20 SERIES**

The DEUTSCH HD30 and HDP20 series are heavy-duty, environmentally sealed, multi-pin circular connectors. Available in metal or thermoplastic housings, these connectors offer multiple pin configurations that accept contact sizes 4 through 20.

# Two leaders in connectivity, now connected

Together, we offer customers an unmatched range of connectivity products and solutions for virtually all applications, including those in the harshest environments.









#### **INTERCONNECTION SYSTEMS**

TE Connectivity's electrical and electronic interconnection products and solutions are used to electrically and mechanically join wires and cables, printed circuit boards, integrated circuit packages and batteries.

#### **HYBRID & ELECTRIC MOBILITY SOLUTIONS**

Electric mobility is changing the way engineers think about vehicles. The way they're designed and engineered. The way they're fueled. Even the way the fuel is delivered. And we're right there with you helping complete the connections for current and next-generation hybrid and electric mobility and the charging infrastructure. TE Connectivity's complete porfolio of connection and protection systems includes connectors, cable assemblies, high-voltage relays and contactors, power distribution units and customer-specific designs.



#### **CABLE ASSEMBLIES**

TE Connectivity is your partner for vehicle-specific cable assemblies. We offer research and development capabilities, prototypes and samples, as well as manufacturing facilities for special cable assemblies.

#### **SENSORS**

TE Connectivity provides contactless and electromechanical products with robust housing technologies, connection systems and temperature-resistant design for use in a variety of industrial and commercial transportation applications.

#### **INFOTAINMENT**

TE Connectivity offers a wide variety of infotainment solutions for consumer port connections, high data rate applications, next-generation harness architecture, board-to-board connections and vehicle-to-vehicle communication.

#### **RELAYS**

TE Connectivity's 24 V relays feature a broad range of highly robust and versatile relays for cross car line usage to meet the stringent in-field requirements found particularly in trucks, buses and heavy industry. Designed to operate in relatively harsh environments and with increased contact gaps, they are suitable for use under conditions of extended shock and vibration.



## **Customer Experience**

We know that our customers count on getting it done right. Getting it done faster. That's why TE Connectivity has made significant investments to ensure that we're delivering extraordinary customer experiences, every step of the way—from early engineering collaboration and sales support, all the way through a relentless focus on improving on-time delivery and worldwide support and service.



EVERY CONNECTION COUNTS



# We provide options to meet your needs.

TE Connectivity offers sales options to service all Industrial & Commercial Transportation customers, including factory direct, LADD Distribution and third party distribution.

Contact your local sales representative for more information.

#### **Americas**

Argentina - Buenos Aires Phone: +54-11-4733-2202 +54-11-4733-2250 Fax:

Brasil

São Paulo Phone: +55-11-2103-6105

+55-11-2103-6204 Fax:

Curitiba

Phone: +55-41-8852-6751

Chile - Santiago

Phone: +56-2-345-0300 Fax: +56-2-223-1477

Canada - Toronto

Phone: +1-905-475-6222 +1-905-474-5520 **Product Information Center:** Phone: +1-905-470-4425 +1-905-474-5525 Fax:

Colombia - Bogotá (Venezuela/Ecuador) Phone: +57-1-319-8999

+57-1-319-8989

Mexico - Mexico City

Phone: +52-55-1106-0800 +01-800-733-8926

+52-55-1106-0910

For Latin/South American Countries not shown

Phone: +54-11-4733-2015 +54-11-4733-2083 Fax:

**United States** 

Harrisburg, PA Phone: +1-717-564-0100 +1-717-986-7575

Product Information Center: Phone: +1-800-522-6752 Fax: +1-717-986-7575

Hemet CA

Customer Service Team Phone: +1-951-765-2250 +1-951-765-2255 Fax:

Kettering, OH LADD Distribution

Phone: +1-800-223-1236 +1-937-438-9755

# Asia/Pacific

Australia - Sydney Phone: +61-2-9554-2600 +61-2-9502-2556 **Product Information Center:** Phone: +61-2-9840-8200

+61-2-9634-6188

Indonesia - Jakarta Phone: +65-6482-0311 Fax: +65-6482-1012

Japan

Kawasaki, Kanagawa Phone: +81-44-844-8111 +81-44-812-3207

Itabashi-ku, Tokyo LADD Distribution Phone: +81-3-5922-1345 Korea - Seoul

Phone: +82-2-3415-4500 +82-2-3486-3810

Malaysia - Kuala Lumpur Phone: +60-3-7805-3055 Fax: +60-3-7805-3066

New Zealand - Auckland Phone: +64-9-634-4580 Fax: +64-9-634-4586

Philippines - Makati City Phone: +632-848-0171 +632-867-8661

People's Republic of China

Hong Kong

Phone: +852-2738-8731 +852-2735-0243

Shanghai

Phone: +86-21-2407-1588 +86-21-2407-1599 Fax: LADD Distribution Phone: +86-21-6608-2211

Singapore - Singapore Phone: +65-6482-0311 +65-6482-1012 Fax:

**Taiwan** 

Taipei

Phone: +886-2-8768-2788 +886-2-8768-2268

Taichung

Phone: +886-4-2258-5615

Thailand - Bangkok Phone: +66-2-955-0500 +66-2-955-0505

Vietnam - Ho Chi Minh City Phone: +84-8-930-5546 +84-8-930-3443

#### **Disclaimer**

Although TE Connectivity has made every effort to verify the correctness of the information in this catalog, TE Connectivity does not guarantee that it is error-free, accurate, correct, reliable or current. TE Connectivity reserves the right to change the information contained in this catalog at any time without notice. TE Connectivity expressly disclaims any warranty as to the information given in this catalog, including the implied warranties of merchantability or fitness for a particular purpose. The measurements contained in this catalog are for reference purposes. Specifications are subject

to change. Please contact TE Connectivity for the latest dimensions and design specifications.

DEUTSCH man (image), AMP MCP, EVERY CONNECTION COUNTS, AMPSEAL, AMPSEAL 16, LEAVYSEAL, TE connectivity (logo) and TE Connectivity are trademarks.

Other products mentioned herein may be trademarks or trade names of their respective owners.



#### **Europe/Middle East/Africa**

Austria - Vienna Phone: +43-1-905-60-0 +43-1-905-60-1333 **Product Information Center:** Phone: +43-1-905-60-1228 +43-1-905-60-1333

Belarus - Minsk

Phone: +375-17-237-47-94 +375-17-237-47-94 Product Information Center: Phone: +7-495-790-7902 +7-495-721-1893

Belaium - Kessel-Lo Phone: +31-73-6246-246 +31-73-6212-365 Fax: Product Information Center: Phone: +31-73-6246-999 +31-73-6246-998 Fax:

**Bulgaria** - Sofia Phone: +359-2-971-2152 +359-2-971-2153

Czech Republic and Slovakia Czech Republic - Kurim Phone: +420-541-162-108 +420-541-162-104 Product Information Center: Phone: +420-541-162-113 +420-541-162-104

LADD Distribution EMEA Phone: +49-89-899157-0

**Denmark** - Glostrup Phone: +45-43-48-04-00 +46-8-50-72-50-01 **Product Information Center:** Phone: +46-8-50-72-50-20 Fax: +46-8-50-72-52-20

Egypt - Cairo Phone: +20-2417-7647 +20-2419-2334

Estonia - Tartu Phone: +372-5138-274 +372-7400-779

Finland - Helsinki Phone: +358-95-12-34-20 +46-8-50-72-50-01 Product Information Center: Phone: +46-8-50-72-50-20 Fax: +46-8-50-72-52-20

**France** - Cergy-Pontoise Cedex Phone: +33-1-3420-8888 Fax: +33-1-3420-8800 **Product Information Center:** 

Phone: +33-1-3420-8686 +33-1-3420-8623 LADD Distribution EMEA

Phone: +49-89-899157-0 France Export Divisions -

Cergy-Pontoise Cedex Phone: +33-1-3420-8866 +33-1-3420-8300 Fax:

Germany

Bensheim Phone: +49-6251-133-0 +49-6251-133-1600 Fax: Product Information Center: Phone: +49-6251-133-1999 +49-6251-133-1988 Fax:

Martinsried LADD Distribution Phone: +49-89-899157-0

Greece - Athens Phone: +30-210-9370-396/397 +30-210-9370-655

**Hungary** - Budapest Phone: +36-1-289-1000 Fax: +36-1-289-1010 Product Information Center: Phone: +36-1-289-1016 Fax: +36-1-289-1017

LADD Distribution EMEA Phone: +49-89-899157-0

India - Bangalore Phone: +91-80-2854-0800 Fax: +91-80-2854-0814 **DEUTSCH India Power** Connectors Pvt. Ltd. Phone: +91-80-404-66-500

Israel - Ashkelon Phone: +972-8-671-9020

Italy

Collegno (Torino) Phone: +39-011-4012-111 +39-011-4031-116 Fax: **Product Information Center:** Phone: +39-011-4012-632 +39-011-4028-7632 Fax:

Milano

Phone: +39-02-3932-2240

Lithuania and Latvia **Lithuania** - Vilnius Phone: +370-5-213-1402

+370-5-213-1403 Fax:

Netherlands - 's-Hertogenbosch Phone: +31-73-6246-246 +31-73-6212-365 Fax: **Product Information Center:** Phone: +31-73-6246-999 +31-73-6246-998

LADD Distribution EMEA Phone: +49-89-899157-0

Norway - Nesbru Phone: +47-66-77-88-50 +46-8-50-72-50-01 Product Information Center: Phone: +46-8-50-72-50-20 +46-8-50-72-52-20

Poland - Warsaw Phone: +48-22-4576-700 +48-22-4576-720 Product Information Center: Phone: +48-22-4576-704 +48-22-4576-720

Romania - Bucharest Phone: +40-21-311-3479/3596 +40-21-312-0574 Fax:

Russia

Moscow Phone: +7-495-790-7902 +7-495-721-1893 Product Information Center: Phone: +7-495-790-7902 Fax: +7-495-721-1893

Yekaterinburg Phone: +7-343-2531-153 Fax: +7-343-2531-152

Nizhniy Novgorod

Phone: +7-831-220-33-05/-06 +7-831-220-33-39/-40

Slovenia - Ljubljana Phone: +386-1561-3270 +386-1561-3240 Fax:

South Africa - Port Elizabeth Phone: +27-41-503-4500 Fax: +27-41-581-0440

Spain - Barcelona Phone: +34-93-291-0330 Fax: +34-93-201-7879 **Product Information Center:** Phone: +34-93-291-0366 +34-93-209-1030 Fax:

Sweden - Upplands Väsby

(Switchboard)

Phone: +46-8-50-72-50-00 +46-8-50-72-50-01 Product Information Center: Phone: +46-8-50-72-50-20 +46-8-50-72-52-20

LADD Distribution EMEA Phone: +49-89-899157-0

Switzerland - Steinach Phone: +41-71-447-0447 Fax: +41-71-447-0444 **Product Information Center:** Phone: +41-71-447-0447 +41-71-447-0400

LADD Distribution EMEA Phone: +49-89-899157-0

Turkev - Istanbul

Phone: +90-212-281-8181/2/3 +90-212-282-5130/5430 Fax: +90-212-281-8184

Ukraine - Kiev

Phone: +380-44-206-2265 Fax: +380-44-206-2264 Product Information Center: Phone: +380-44-206-2265 +380-44-206-2264 Fax:

**United Kingdom and Ireland** 

Swindon

Phone: +44-8706-080208 Fax: +44-208-954-6234 Product Information Center: Phone: +44-800-267-666 +44-208-420-8095

Other partners on request. Please contact us.

Phone: +49-89-899157-0



http://www.te.com http://www.te.com/en/industries/industrial-commercial-transportation.html

Tyco Electronics AMP GmbH a TE Connectivity Ltd. company AMPèrestraße 12-14 • 64625 Bensheim/Germany

Tyco Electronics AMP GmbH certified acc. ISO 14001 and ISO/TS 16949:2002
© 2012 Tyco Electronics AMP GmbH 1654320-1 Issued 10-2012 1.5M ST

