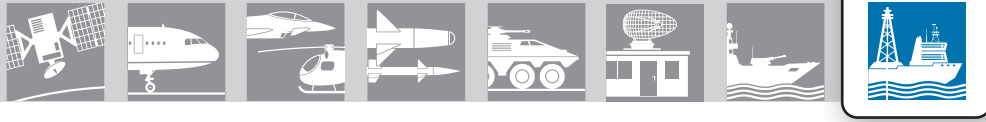


Signal Connectors for Topside and Subsea Applications



DEUTSCH



Withstand the Hazards of Offshore

DEUTSCH signal connectors from TE Connectivity (TE) deliver rugged reliability in challenging and harsh environments experienced in topside, subsea, and downhole environments. We work closely with both equipment designers and exploration/production companies to create connectivity solutions to meet the specific demands of an application.

Among the advantages you will find in our range of signal connectors are the following:

Find the Right Connector for Your Application

- Dry-mate, splash-zone, and wet-mate configurations
- Explosion-proof versions meeting ATEX/CSA/IECEX requirements for increased topside safety
- Robust performance under extreme pressures, temperatures, and corrosive conditions

Combine Signals and Controls in a Single Connector

- Hybrid fiber/copper versions with both optical and electrical contacts
- Variety of contacts sizes for different current-carrying needs

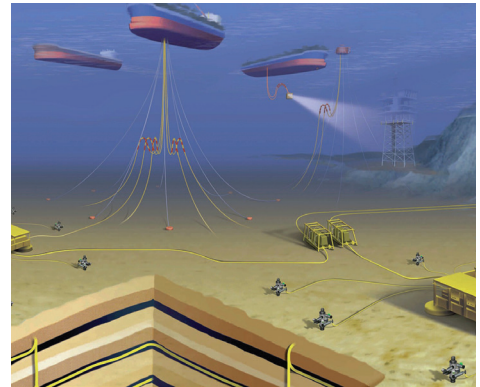
TE Components . . . TE Technology . . . TE Know-how . . .

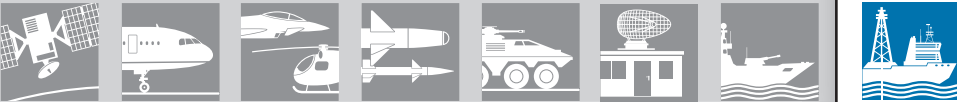
AMP | Agastat | CII | Hartman | Kilovac | Microdot | Nanonics | Raychem | Rochester | DEUTSCH

Get your product to market faster with a smarter, better solution.

Go to: DesignSmarterFaster.com.
Your best place to get started, today!

Here you can get connected to the inner circle of TE AD&M's best thinkers. Working together early in your design review process, we can help you reach a better connectivity solution.





9316 Series Dry-Mate Connectors

Designed for easy handling and to withstand high mechanical stress

- Dry-mate connector
- Topside and subsea use
- Explosion proof

Electrical Properties

- **Number of Contacts:** 1 to 121
- **Contact size:** Size 20 to 300 mm² for 24 AWG to 600 AWG wires
- **Rated Voltage (pin to ground):**
250 VAC (service 1)
650 VAC (service 2)
Up to 2000 VAC for power arrangement (consult TE)
- **Rated Current:** From 5 to 33 A per contact, depending on arrangement
Up to 600 A for power arrangement (consult TE)

Mechanical Properties

- **Rated Pressure:** Up to 750 bar (10,875 psi), depending on versions
- **Rated Temperature:** -20°C to 190°C (-4°F to 374°F), depending on versions

Materials

- **Housings:** AISI 316L
- **Insulators:** Glass, silicone, thermoplastic
- **Contacts:** Gold-plated copper alloy
- **Coupling Rings:** Marine bronze
- **Elastomers:** Butadien nitril (NBR), fluorocarbon (FKM), silicone

Explosion-Proof Standards

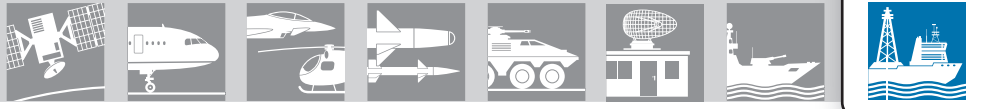
- **Compliance:** ATEX, CSA (consult TE), IECEx (consult TE)
- **ATEX Rating:** II 2 G Ex d IIB Gb (component)

Additional Characteristics

- Hermetic connectors (receptacle)
- Different size and flange configurations



SIGNAL CONNECTORS FOR TOPSIDE AND SUBSEA APPLICATIONS



MSD Series Splash-Zone Connectors

Quick connect/disconnect in hazardous areas such as FPSO turrets

- Splash-zone connector
- Top side and subsea use
- Quick-connect/disconnect solution
- Explosion proof

Electrical Properties

- **Number of Contacts:** 12 or 13
- **Contact size:** Size 12 for 16 AWG to 10 AWG wires
- **Rated Voltage (pin to ground):** 1000 VAC
- **Rated Current:** Up to 20 A, depending on version

Mechanical Properties

- **Rated Pressure:** Up to 140 bar (2030 psi), depending on version
- **Rated Temperature:** 10°C to 45°C (50°F to 113°F)

Materials

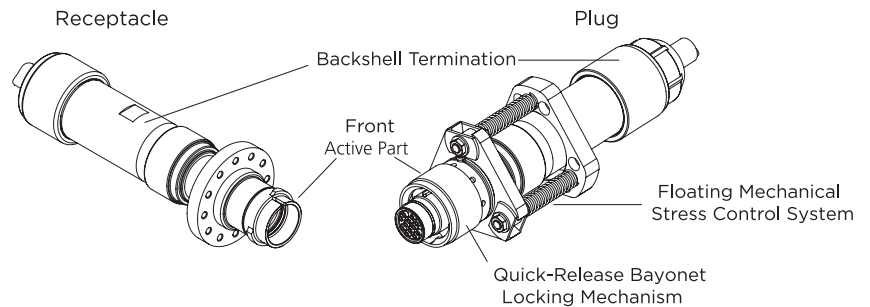
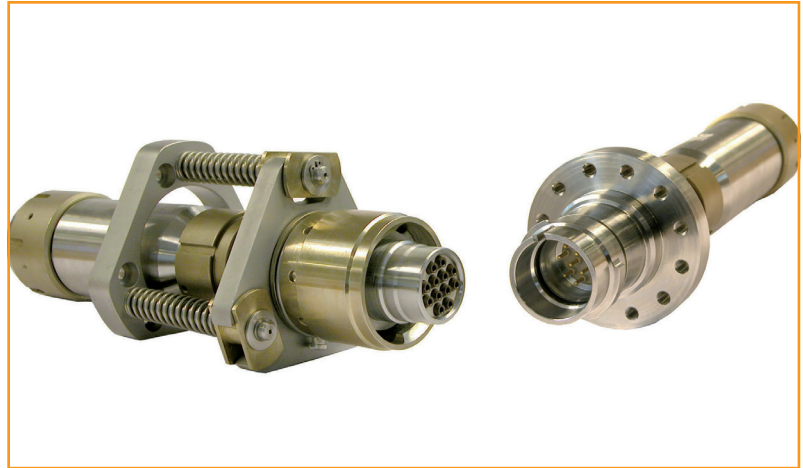
- **Housings:** AISI 316L
- **Insulators:** PEEK, silicone
- **Contacts:** Gold-plated copper alloy
- **Coupling Rings:** Marine bronze
- **Elastomers:** Fluorosilicone, fluorocarbon (FKM)

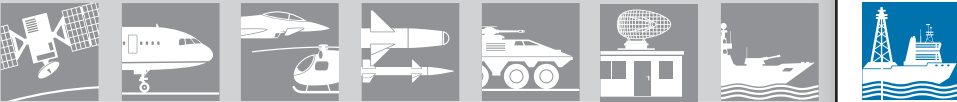
Explosion-Proof Standards

- **Compliance:** ATEX, CSA (consult TE)
- **ATEX Rating:** II 2 G Ex d IIB T4... T6 (equipment)

Additional Characteristics

- Alignment system for stabplate conditions





DS3001 Series Wet-Mate Connectors

Optimized for subsea distribution systems and connections to subsea trees

- Wet-mate connectors
- Topside and subsea use
- ROV, diver, stabplate configurations

Electrical Properties

- **Number of Contacts:** 4, 7, 8, or 12
- **Rated Voltage:** 1000 VAC
- **Rated Current:** 40 A

Mechanical Properties

- **Rated Pressure:** 300 bar (4350 psi)
- **Rated Temperature:** -5°C to 40°C (23°F to 104°F)

Materials

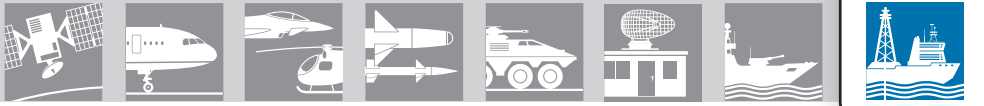
- **Housings:** AISI 316L or superduplex
- **Insulators:** PEEK, dielectric oil
- **Contacts:** Gold-plated copper alloy
- **Coupling Rings:** 316L (for diver version)
- **Elastomers:** Fluorocarbon (FKM)

Additional Characteristics

- Sealing boot terminations
- Cable and jumper (oil-filled hose) assembly
- Straight and elbow configurations



SIGNAL CONNECTORS FOR TOPSIDE AND SUBSEA APPLICATIONS



EFS Series Connectors

Electrical feedthrough system for 1140 bar (16,530 psi) rated X-mas trees

- Wet-mate and dry-mate connectors
- Topside and subsea use
- X-mas tree and TH applications

Electrical Properties

- **Number of Contacts:** Up to 4 (3 + 1 ground)
 - Size 16 and 20 for 16 AWG or 20 AWG wires
- **Rated Voltage:** 500 VAC
- **Rated Current:** 5 A

Mechanical Properties

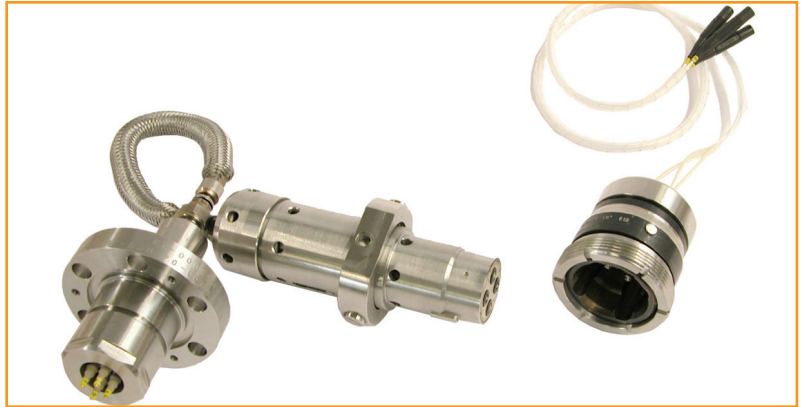
- **Rated Pressure:** Up to 1140 bar (16,530 psi), depending on version
- **Rated Temperature:** -18°C to 177°C (0°F to 350°F), depending on version

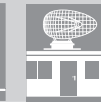
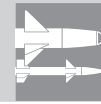
Materials

- **Housings:** High-grade nickel alloy, superduplex
- **Insulators:** Glass, PEEK, dielectric oil
- **Contacts:** Gold-plated copper alloy, superduplex
- **Coupling Rings:** Titanium, superduplex, Inconel
- **Elastomers:** Fluorocarbon (FKM)

Additional Characteristics

- HH NACE MR0175
- PSL3G qualified
- Hermetic connectors
- Double metal-to-metal sealing solutions
- Sealing boot terminations
- Standard Ø1/4" (6.35 mm) DHG control line interface





DLS Series Wet-Mate Connectors

Compact in-line connectivity for high-pressure, high-temperature downhole applications

- Wet-mate connector
- Downhole use
- Logging and monitoring tool applications

Electrical Properties

- **Number of Contacts:** 1 to 7
- **Contact Size:** Size 16 for 16 AWG or 20 AWG wire
- **Rated Voltage:** 840 VAC
- **Rated Current:** 1.7 A

Mechanical Properties

- **Rated Pressure:** 2070 bar (30,020 psi)
- **Rated Temperature:** -20°C to 205°C (-4°F to 401°F)

Materials

- **Housings:** Superduplex, marine bronze
- **Insulators:** PEEK, dielectric oil
- **Contacts:** Gold-plated copper alloy
- **Elastomers:** Fluorocarbon (FKM)

Additional Characteristics

- Multipin linear connector
- Sealing boot terminations



SIGNAL CONNECTORS FOR TOPSIDE AND SUBSEA APPLICATIONS

FOR MORE INFORMATION

Technical Support

North America	+1 800 522 6752
Asia Pacific	+86 0 400 820 6015
Austria	+43 1 905 601 228
Baltic Regions	+46 8 5072 5000
Benelux	+31 73 6246 999
Czech Republic	+420 800 701 462
France	+33 1 34 20 86 86
Germany	+49 6251 133 1999
Hungary	+36 809 874 04
Italy	+39 011 401 2632
Nordic	+46 8 5072 5000
Poland	+48 800 702 309
Russia	+7495 790 790 2
Spain/Portugal	+34 93 2910366
Switzerland	+41 52 633 66 26
United Kingdom	+44 800 267 666

Follow us on Twitter for all the latest product news
@TEConnectivity, and on Facebook, TEConnectivity.

Connect with one of our Subject Matter Experts
at www.DesignSmarterFaster.com

www.te.com/ADM

© 2014 TE Connectivity Ltd. family of companies. All Rights Reserved.

1-1773723-7 ADM/RRD 1M 02/2014

DEUTSCH, Deutsch man image, TE Connectivity, and the TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies.



Other products, logos, and company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information herein, nothing herein constitutes any guarantee that such information is error-free, or any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. The TE entity issuing this publication reserves the right to make any adjustments to the information contained herein at any time without notice. All implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose are expressly disclaimed. The dimensions herein are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice.

Consult TE for the latest dimensions and design specifications.



DEUTSCH