

Deutsch DT06-6S

Deutsch DT06-6S 6-Way Automotive Connector Instruction Manual

Brand: Deutsch | Model: DT06-6S

1. PRODUCT OVERVIEW

The Deutsch DT06-6S is a 6-way automotive connector designed for use in harsh environments where connection integrity is critical. These connectors feature thermoplastic housings that provide a wide operating temperature range and silicone rear wire and interface seals, enabling them to withstand extreme temperatures and moisture. The DT series is known for its robust design and reliable performance in demanding applications.



Image 1.1: Deutsch DT06-6S 6-Way Automotive Connector. This image displays the grey thermoplastic housing of the connector, featuring a 6-way cavity arrangement and an orange silicone seal.

2. KEY FEATURES

- **Cavity Arrangements:** Supports 2, 3, 4, 6, 8, and 12 cavity configurations (this specific model is 6-way).
- **Housing Material:** Rectangular, thermoplastic housing for durability and wide temperature tolerance.
- **Contact Size:** Accepts contact size 16, rated for up to 13 amps.
- **Wire Gauge Compatibility:** Suitable for 14-0 AWG wires.
- **Contact Retention:** Wedgelocks ensure proper contact alignment and retention.
- **Sealing:** Silicone rubber grommet, insert retainer, and receptacle interfacial seal provide excellent protection against moisture and contaminants.

3. SETUP AND INSTALLATION

Proper installation is crucial for the reliable performance of your Deutsch DT connector. Follow these steps carefully:

1. **Prepare Wires:** Strip approximately 4-6mm (0.16-0.24 inches) of insulation from the end of each wire. Ensure the stripped wire is clean and free of frayed strands.
2. **Crimp Contacts:** Using a suitable crimping tool for Deutsch contacts (size 16), crimp the appropriate Deutsch contacts onto the stripped wire ends. Ensure the crimp is secure and the wire strands are fully enclosed within the contact barrel.
3. **Insert Contacts:** Push the crimped contacts into the rear of the connector housing until a click is heard or felt. Gently pull on the wire to ensure the contact is fully seated and locked into place.
4. **Install Wedgeloek:** Once all contacts are inserted, install the appropriate wedgeloek into the front of the connector housing. The wedgeloek secures the contacts and prevents them from backing out.
5. **Inspect:** Visually inspect all connections to ensure contacts are properly seated and the wedgeloek is fully engaged.

Note: Always use the correct crimping tools and follow manufacturer guidelines for contact crimping to ensure optimal performance and reliability.

4. OPERATING INSTRUCTIONS

Connecting and disconnecting Deutsch DT connectors is straightforward:

- **Mating Connectors:** Align the male and female connector halves. Push them together firmly until the locking tab engages with an audible click. Ensure the connection is secure by gently pulling on both halves.
- **Unmating Connectors:** To disconnect, depress the locking tab on the connector and pull the two halves apart. Do not pull on the wires to disconnect, as this can damage the contacts or wires.

5. MAINTENANCE

Deutsch DT connectors are designed for low maintenance, but periodic inspection can extend their lifespan and ensure continued reliability:

- **Visual Inspection:** Periodically inspect the connector for any signs of damage, such as cracks in the housing, corrosion on contacts, or degradation of the silicone seals.
- **Cleaning:** If necessary, clean the connector surfaces with a clean, dry cloth. For stubborn dirt, a non-conductive electrical contact cleaner can be used. Ensure the connector is completely dry before re-mating.
- **Seal Integrity:** Check the integrity of the silicone seals. If seals appear damaged or brittle, the connector's environmental protection may be compromised.

6. TROUBLESHOOTING

If you encounter issues with your Deutsch DT connector, consider the following:

- **No Connection/Intermittent Connection:**
 - Ensure contacts are fully seated and locked into the housing.

- Verify the wedgelock is correctly installed.
- Check for proper crimp quality on the contacts.
- Inspect contacts for corrosion or bending.
- **Difficulty Mating/Unmating:**
 - Ensure correct alignment of the connector halves.
 - Check for obstructions or damage to the locking mechanism.
 - Do not force the connection; inspect for issues first.
- **Moisture Ingress:**
 - Inspect silicone seals for damage or improper seating.
 - Ensure the connector halves are fully mated.

7. SPECIFICATIONS

Attribute	Detail
Brand Name	Deutsch
Model Number	DT06-6S
Part Number	DT06-6S
Number of Ways/Cavities	6
Contact Size	16
Max Current Rating	13 Amps (per contact)
Housing Material	Thermoplastic
Seal Material	Silicone Rubber
Item Weight	8.65 Kilograms (Note: This weight seems unusually high for a single connector and might refer to a bulk package. Please verify with supplier if individual unit weight is critical.)

8. SAFETY INFORMATION

When working with electrical connectors, always observe the following safety precautions:

- **Disconnect Power:** Always ensure power is disconnected from the circuit before installing, maintaining, or troubleshooting electrical connectors.
- **Use Proper Tools:** Use only appropriate tools for crimping and handling contacts to prevent damage to the connector or injury.
- **Insulation:** Ensure all wires are properly insulated and that no bare wires are exposed after installation.
- **Environmental Conditions:** Do not exceed the specified operating temperature or environmental conditions for the connector.

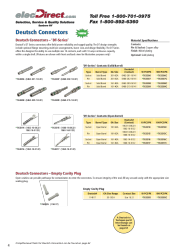



- **Professional Installation:** If you are unsure about any aspect of installation or wiring, consult a qualified professional.


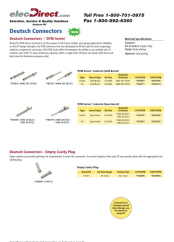
9. WARRANTY AND SUPPORT

Specific warranty information for the Deutsch DT06-6S connector is typically provided by the point of purchase or the manufacturer, TE Connectivity. Please refer to your purchase documentation or the official Deutsch/TE Connectivity website for detailed warranty terms and conditions.

For technical support or further inquiries, please contact your supplier or visit the official Deutsch/TE Connectivity support channels.

Related Documents - DT06-6S

	<p>Deutsch DT-Series Connectors: Contacts, Housings, Tools & Specifications ElecDirect</p> <p>Comprehensive guide to Deutsch DT-Series environmentally sealed electrical connectors, including contacts, housings, wedgelocks, crimp tools, removal tools, technical specifications, and interchangeability. Ideal for harsh industrial environments.</p>
	<p>DEUTSCH CTJ Series Common Termination System</p> <p>Explore the DEUTSCH CTJ Series Common Termination System, featuring AS81714 Series II Qualified Products for robust and highly reliable wire termination in demanding environments. Discover modules, rails, contacts, and tooling for aerospace, defense, and military applications.</p>
	<p>Deutsch G1 Firmware Flashing Tutorial</p> <p>Step-by-step guide to download, configure, and flash firmware onto the Deutsch G1 device using SP Flash Tool. Includes driver installation and troubleshooting tips.</p>
	<p>Deutsch DTM Series Transportation Connectors Technical Manual</p> <p>Technical manual for Deutsch DTM Series environmental miniature transportation connectors. Covers features, benefits, ordering information, specifications, contact arrangements, drawings, tooling, assembly, and applications.</p>

 <p>TE Connectivity Deutsch HD10 CONNECTOR SERIES</p> <p>TE Connectivity</p>	<p>TE Connectivity Deutsch HD10 Connector Series Catalog</p> <p>Explore the TE Connectivity Deutsch HD10 Connector Series, a robust, environmentally sealed, thermoplastic, and cylindrical connector system designed for harsh industrial and commercial transportation environments. This catalog details specifications, features, applications, part numbers, and accessories for the HD10 series.</p>
 <p>elecDirect Deutsch Connectors DTM-Series</p> <p>elecDirect</p>	<p>Deutsch DTM-Series Connectors & Accessories elecDirect.com</p> <p>Discover Deutsch DTM-Series environmentally sealed electrical connectors, contacts, housings, and tools. Ideal for harsh industrial applications. Provided by elecDirect.com.</p>