

Taidacent 12 way 10A

Taidacent 12-Way 10A Slip Ring Power Connector Instruction Manual

Model: 12 way 10A

1. PRODUCT OVERVIEW

The Taidacent 12-Way 10A Slip Ring Power Connector is an electrical device designed for continuous transmission of power and signals across a rotating interface. This component facilitates electrical connection between stationary and rotating parts, enabling 360-degree rotation without interruption. It is suitable for various high-power equipment, including induction cookers and small wind turbines, where reliable rotational electrical contact is essential.

2. SPECIFICATIONS

Feature	Detail
Number of Channels	12
Current Rating	10A per channel
Voltage Range	0-240V (DC/AC)
Shell Material	Engineering Plastic
Insulation Resistance	500MΩ@250VDC/AC
Working Temperature	-40 °C to 80 °C
Working Humidity	0 85%RH
Electrical Noise	<10mΩ@6VDC, 50mA, 5RPM
Pressure Resistance	800VDC@50Hz, 10s

Feature	Detail
Insulation Strength	300VAC@50Hz, 60s
Speed Range	0 ~ 250 RPM
Contact Material	Precious metal (gold-gold)
Ring Material	Gold plating on copper surface, AU≥30U, R<0.2
Torque	<0.06N.m
Wire Length	150~250mm
Protection Level	IP51
Item Weight	5.1 ounces
Package Dimensions	7.01 x 4.8 x 2.05 inches

3. INSTALLATION

The Taidacent 12-Way 10A Slip Ring is designed for flexible installation, with the rotating end and the stationary end being interchangeable. Proper mounting and wiring are crucial for optimal performance.

3.1 Dimensions and Mounting

Refer to the technical drawing below for precise dimensions and mounting hole specifications. Ensure adequate clearance for rotation and wire connections.

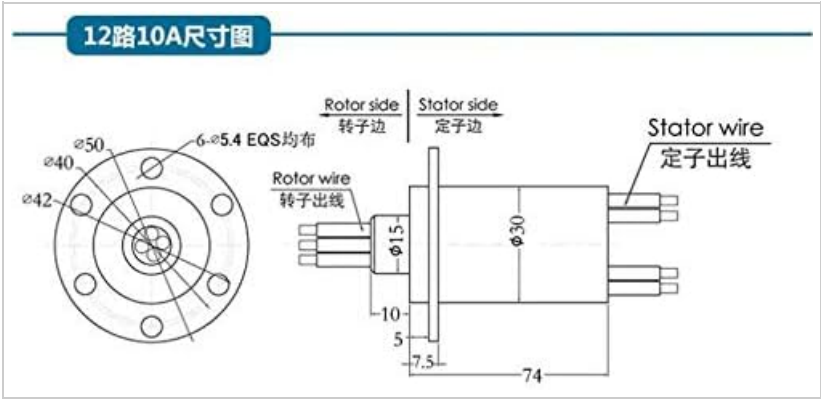


Image Description: This technical drawing illustrates the dimensions of the Taidacent 12-Way 10A Slip Ring Power Connector. It includes a top-down view showing mounting hole details: six holes with a diameter of 5.4mm, evenly distributed on a 42mm diameter circle. The outer diameter is 50mm, and the inner diameter is 40mm. A side view provides overall dimensions, indicating a total length of 74mm, a main body diameter of 30mm, and a rotor side diameter of 15mm. Labels clearly identify the rotor wire and stator wire connections.

3.2 Wiring

Connect the rotor wires to the rotating part of your application and the stator wires to the stationary part. Ensure all connections are secure and properly insulated to prevent short circuits and ensure reliable operation. Observe the specified voltage and current limits for each channel.

4. OPERATION

Once installed and wired correctly, the slip ring will provide continuous electrical connectivity during 360-degree rotation. Ensure the operating environment adheres to the specified temperature and humidity ranges to maintain optimal performance and product longevity. The maximum rotational speed should not exceed 250 RPM.

5. MAINTENANCE

The Taidacent 12-Way 10A Slip Ring Power Connector is a sealed unit and generally requires no specific user maintenance. To ensure continued reliable operation, regularly inspect the external wiring for any signs of wear or damage. Keep the operating environment clean and free from excessive dust or moisture, which could compromise the IP51 protection level.

6. TROUBLESHOOTING

If the slip ring is not functioning as expected, consider the following:

- **No Power/Signal Transmission:** Verify all electrical connections are secure and correctly wired. Check for continuity in the connected circuits.
- **Intermittent Connection:** Ensure the rotational speed is within the specified range (0-250 RPM). Check for any physical obstructions or excessive vibration that might affect contact.
- **Overheating:** Confirm that the current draw does not exceed 10A per channel and that the total power consumption is within the device's limits. Ensure the ambient temperature is within the -40 °C to 80 °C operating range.

For persistent issues, contact customer support.

7. SUPPORT AND WARRANTY

For product support, technical assistance, or warranty inquiries, please refer to the seller's contact information provided at the point of purchase or consult the original product documentation. Specific warranty terms may vary by region and retailer.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question