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WindyNation 6/3 6 AWG SOOW SO Cable

WindyNation 6/3 6 AWG SOOW SO Cable User Manual

Model: 6/3 6 AWG SOOW SO Cable

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your WindyNation 6/3 6 AWG SOOW SO Cable. This cable is designed for demanding applications requiring a durable, flexible, and weather-resistant power solution. Please read this manual thoroughly before installation and operation.

2. PRODUCT FEATURES

The WindyNation 6/3 6 AWG SOOW SO Cable offers robust performance with the following key features:

- **UL62 and CSA C22.2 Standards:** Meets recognized safety and performance standards for flexible cords and cables.
- **SOOW Designation:**
 - **S** = Service Cord
 - **OO** = Oil Resistant (both inside and outside insulation)
 - **W** = Weather and Water Resistant
- **High Voltage Rating:** Rated for up to 600 volts.
- **Wide Temperature Range:** Operates effectively from -40°C (-40°F) to 90°C (194°F).
- **Oil Resistant Temperature Rating:** 60°C (140°F).
- **Durable Insulation:** Resistant to abrasion, battery acid, diesel fuel, engine coolant, engine oil, ethanol, extreme temperatures, flame, gasoline, power-steering fluid, transmission fluid, and water.
- **UV Resistant:** Meets or exceeds 720-hour UV resistant aging test, suitable for outdoor use.
- **Pure Copper Conductors:** Features pure copper strands for optimal conductivity.



Image: Key features of the SOOW cable, highlighting its flexibility, voltage rating, and temperature resistance.



Image: Breakdown of the SOOW cable designation, explaining what each letter signifies.

3. APPLICATIONS

This SOOW cable is suitable for a wide range of demanding applications, including:

- Portable power distribution

- Electric Vehicle (EV) chargers
- Heavy equipment and construction machinery
- Motor leads and welding leads
- Portable lighting setups
- Battery chargers
- Shallow water immersion
- Mining environments
- General applications requiring a rugged, heavy-duty flexible multi-conductor cable.

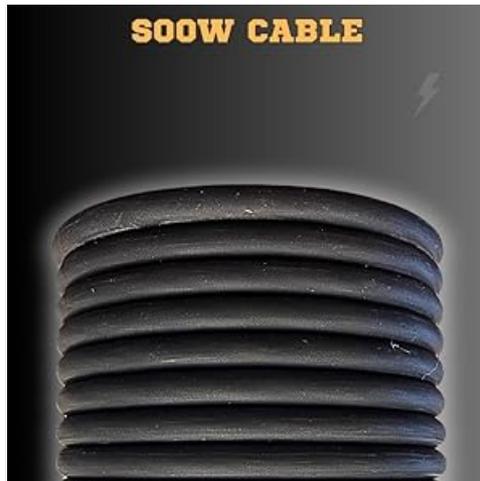


Image: Visual representation of various applications for SOOW cable, including EV charging, portable power, and industrial use.

4. TECHNICAL SPECIFICATIONS

Refer to the table below for detailed technical specifications of the SOOW cable series:

AWG / # Cond	Cable Type	Approval	Volts	Amps	Strand / Diam (mm)	Temp	Overall Diameter (Inch)	Jacket Material
6 / 3	SOOW	ETL	600 V	55	266 / .25	- 40C~90C	0.787"	CPE
6 / 4	SOOW	ETL	600 V	45	266 / .25	- 40C~90C	0.835"	CPE
8 / 3	SOOW	ETL	600 V	40	166 / .25	- 40C~90C	0.693"	CPE
8 / 4	SOOW	ETL	600 V	35	166 / .25	- 40C~90C	0.760"	CPE
10 / 3	SOOW	ETL	600 V	30	73 / .30	- 40C~90C	0.665"	CPE
10 / 4	SOOW	ETL	600 V	25	73 / .30	- 40C~90C	0.713"	CPE

Table: Detailed technical specifications for various SOOW cable configurations.



5. SAFETY INFORMATION

Always adhere to local electrical codes and safety regulations when installing or using this cable. Failure to do so may result in electrical shock, fire, or personal injury.

- Ensure the cable's voltage and amperage ratings are appropriate for your application.
- Do not exceed the maximum rated voltage or current.
- Inspect the cable for damage before each use. Do not use if insulation is cut, frayed, or cracked.
- Avoid sharp bends or kinks that can damage the internal conductors.
- Keep the cable away from extreme heat sources unless specifically rated for such conditions.
- Ensure proper grounding where required.
- Disconnect power before making any connections or disconnections.

Proposition 65 Warning: This product may expose you to chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

6. SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of your SOOW cable. Consult a qualified electrician for complex installations.

1. **Preparation:** Ensure all power sources are disconnected before beginning installation. Gather necessary tools such as wire strippers, crimpers, and connectors appropriate for the cable gauge.
2. **Cutting and Stripping:** Carefully cut the cable to the desired length. Use a wire stripper to remove the outer jacket and then the individual conductor insulation, exposing the pure copper strands. Ensure not to nick the copper strands.
3. **Connection:** Connect the conductors to appropriate terminals or connectors. Ensure secure and tight connections to prevent arcing or overheating. For 6/3 cable, typically you will have three conductors (black, white, green). Note that this cable is not a 4+1 type wire and does not include an extra grounding wire beyond the standard conductors.
4. **Routing:** Route the cable in a manner that avoids physical damage, excessive tension, or exposure to sharp edges. Use cable ties or clamps to secure the cable if necessary.
5. **Testing:** After installation, perform continuity and insulation resistance tests to verify proper wiring and safety before applying power.

Your browser does not support the video tag.

Video: This video demonstrates the features of 600V SOOW cable, including its flexibility and construction, which can be helpful for understanding its handling during setup.

6/3 SOOW

✓ **ULTRA FLEXIBLE 30 AWG
PURE COPPER STRANDS**

✓ **RATED UP TO 600 VOLTS**

✓ **ETL LISTED**

✓ **TEMPERATE RANGE:
-40°C(-40°F) TO 90°C(194°F)**

✓ **OIL RESISTANT TEMPERATURE
RATING: 60°C (140°F)**

SOOW 3/C 6AWG(13.3mm²) -40°C to 90°C FT2 600V

Image: Demonstrates the flexibility of the SOOW cable, important for routing and installation.

6/3 SOOW CABLE

S - Service Cord
O - Oil Resistant Insulation
O - Oil Resistant Jacket
W - Water Resistant



Image: Close-up view of the SOOW cable's internal construction, showing the individual conductors and insulation.

7. OPERATING INSTRUCTIONS

Once installed, the SOOW cable operates as a power conductor. Follow these general guidelines for safe operation:

- Ensure all connections are secure before applying power.
- Do not overload the cable beyond its rated amperage.
- Avoid running heavy machinery over the cable, even though it is rugged, to prevent internal damage.
- If used outdoors, ensure the cable is protected from potential physical damage from vehicles or sharp objects.
- Regularly check for any signs of overheating, such as discolored insulation or a burning smell. Disconnect power immediately if observed.

8. MAINTENANCE

Minimal maintenance is required for the SOOW cable, but regular inspection can extend its lifespan and ensure safety.

- **Visual Inspection:** Periodically inspect the entire length of the cable for any signs of wear, cuts, abrasions, or cracks in the outer jacket.
- **Connection Check:** Ensure all connections remain tight and free from corrosion.

- **Cleaning:** If the cable becomes dirty, wipe it clean with a damp cloth. Avoid using harsh chemicals that could degrade the jacket material.
- **Storage:** When not in use, coil the cable neatly and store it in a dry, cool place away from direct sunlight and extreme temperatures.

9. TROUBLESHOOTING

If you encounter issues with your SOOW cable, consider the following common troubleshooting steps:

Problem	Possible Cause	Solution
No power at load	Loose connection, damaged cable, tripped breaker/fuse, incorrect wiring.	Check all connections. Inspect cable for damage. Reset breaker/replace fuse. Verify wiring against diagrams.
Cable overheating	Overload, poor connection, damaged insulation.	Reduce load. Check and tighten connections. Inspect cable for damage; replace if necessary.
Intermittent power	Loose connection, internal wire break, damaged connector.	Check and secure all connections. Inspect cable for external damage. Replace faulty connectors or cable.

Table: Common troubleshooting scenarios and their solutions for SOOW cables.

If issues persist after troubleshooting, contact customer support or a qualified electrician.

10. WARRANTY AND SUPPORT

For warranty information or technical support, please contact WindyNation directly. Details can typically be found on the product packaging or the official WindyNation website.

Manufacturer: WindyNation

ASIN: B0CGMPHXRF

Date First Available: August 26, 2023

For further assistance, visit the [WindyNation Store on Amazon](#).

