

## SPECIFICATIONS

# SH96F-96M-5 Cable

This document lists specifications for the SH96F-96M-5 shielded cable. All specifications are subject to change without notice.



**Hazardous Voltage** This icon denotes a warning advising you to take precautions to avoid electrical shock.



**Note** The protection provided by the SH96F-96M-5 cable can be impaired if it is used in a manner not described in this document.



**Note** Verify the accessory safety voltage to which you connect the cable by consulting the accessory specification document. If the accessory safety voltage is lower than the cable rating, use the accessory safety voltage rather than the cable rating.

## Definitions

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*Warranted* specifications describe the performance of a model under stated operating conditions and are covered by the model warranty.

The following characteristic specifications describe values that are relevant to the use of the model under stated operating conditions but are not covered by the model warranty.

- *Typical* specifications describe the performance met by a majority of models.
- *Nominal* specifications describe an attribute that is based on design, conformance testing, or supplemental testing.

Specifications are *Typical* unless otherwise noted.

## Conditions

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Specifications are valid for the range 0 °C to 55 °C unless otherwise noted.

## Electrical

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Maximum working voltage (any pin to any pin) 60 V DC



**Note** Connect only voltages that are within the limits of the connected device.

# Mechanical

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Cable wire gauge	28 AWG, twisted pairs 1 through 20
	22 AWG, twisted pair 21
	28 AWG, twisted pairs 22 through 24

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For information regarding SH96F-96M-5 cable conductor pairings and wiring color codes, go to [ni.com/info](https://ni.com/info) and enter Info Code sh96965.

## Physical Requirements

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Clean the hardware with a soft, nonmetallic brush. Make sure that the hardware is completely dry and free from contaminants before returning to service.

Dimensions (available lengths)	1 m (3.3 ft)
	3 m (9.8 ft)
	5 m (16.4 ft)

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### Weights

1 meter	1,187 g (42.2 oz)
3 meters	2,040 g (72.6 oz)
5 meters	2,894 g (102.1 oz)

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### I/O connector

Male	96-pin Type R DIN 41612/IEC 60603-2
Female	96-pin Type C DIN 41612/IEC 60603-2

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## Environmental

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Operating temperature	0 °C to 55 °C
	(Tested in accordance with IEC 60068-2-1 and IEC 60068-2-2. Meets MIL-PRF-28800F Class 3 low temperature limit and MIL-PRF-28800F Class 2 high temperature limit.)

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Storage temperature range	-40 °C to 71 °C
	(Tested in accordance with IEC 60068-2-1 and IEC 60068-2-2. Meets MIL-PRF-28800F Class 3 low temperature limit and MIL-PRF-28800F Class 2 high temperature limit.)

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Relative humidity range, operating	0% to 60%, noncondensing
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Relative humidity range, storage	5% to 95%, noncondensing (Tested in accordance with IEC 60068-2-78 )
Maximum altitude	2,000 m (800 mbar)
Pollution Degree	2
Indoor use only.	

## Shock and Vibration

Operating shock	30 g peak, half-sine, 11 ms pulse (Tested in accordance with IEC 60068-2-27. Meets MIL-PRF-28800F Class 2 limits.)
Random vibration	
Operating	5 Hz to 500 Hz, 0.3 g <sub>rms</sub>
Non-operating	5 Hz to 500 Hz, 2.4 g <sub>rms</sub> (Tested in accordance with IEC 60068-2-64. Nonoperating test profile exceeds the requirements of MIL-PRF-28800F, Class 3.)

## Safety

This product is designed to meet the requirements of the following electrical equipment safety standards for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 61010-1, CSA C22.2 No. 61010-1



**Note** For UL and other safety certifications, refer to the product label or the [Online Product Certification](#) section.

## CE Compliance

This product meets the essential requirements of applicable European Directives, as follows:

- 2014/35/EU; Low-Voltage Directive (safety)
- 2014/30/EU; Electromagnetic Compatibility Directive (EMC)

## Online Product Certification

Refer to the product Declaration of Conformity (DoC) for additional regulatory compliance information. To obtain product certifications and the DoC for this product, visit [ni.com/](http://ni.com/)

*certification*, search by model number or product line, and click the appropriate link in the Certification column.

## Environmental Management

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NI is committed to designing and manufacturing products in an environmentally responsible manner. NI recognizes that eliminating certain hazardous substances from our products is beneficial to the environment and to NI customers.

For additional environmental information, refer to the *Minimize Our Environmental Impact* web page at [ni.com/environment](https://ni.com/environment). This page contains the environmental regulations and directives with which NI complies, as well as other environmental information not included in this document.

## Waste Electrical and Electronic Equipment (WEEE)

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**EU Customers** At the end of the product life cycle, all NI products must be disposed of according to local laws and regulations. For more information about how to recycle NI products in your region, visit [ni.com/environment/weee](https://ni.com/environment/weee).

## 电子信息产品污染控制管理办法（中国 RoHS）

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**中国客户** National Instruments 符合中国电子信息产品中限制使用某些有害物质指令 (RoHS)。关于 National Instruments 中国 RoHS 合规性信息, 请登录 [ni.com/environment/rohs\\_china](https://ni.com/environment/rohs_china)。(For information about China RoHS compliance, go to [ni.com/environment/rohs\\_china](https://ni.com/environment/rohs_china).)

## Worldwide Support and Services

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Visit [ni.com/services](https://ni.com/services) for information about the services NI offers.

Visit [ni.com/register](https://ni.com/register) to register your NI product. Product registration facilitates technical support and ensures that you receive important information updates from NI.

A Declaration of Conformity (DoC) is our claim of compliance with the Council of the European Communities using the manufacturer's declaration of conformity. This system affords the user protection for electromagnetic compatibility (EMC) and product safety. You

can obtain the DoC for your product by visiting [ni.com/certification](https://ni.com/certification). If your product supports calibration, you can obtain the calibration certificate for your product at [ni.com/calibration](https://ni.com/calibration).

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