

CC-Link



CCNC-SB110H

(Version 1.10 and 2.0-compatible, characteristic impedance 110Ω type)

CCNC-SB (Version 1.00-compatible, characteristic impedance 100Ω type)

CCNC-SBH (Version 1.00-compatible, characteristic impedance 130Ω type)

CCNC-SB110SF-5 (Version 1.10 and 2.0-compatible, cables for movable use)

CCNC-SB110H+PW (Version 1.10 and 2.0-compatible, composite cable with built-in power cable)

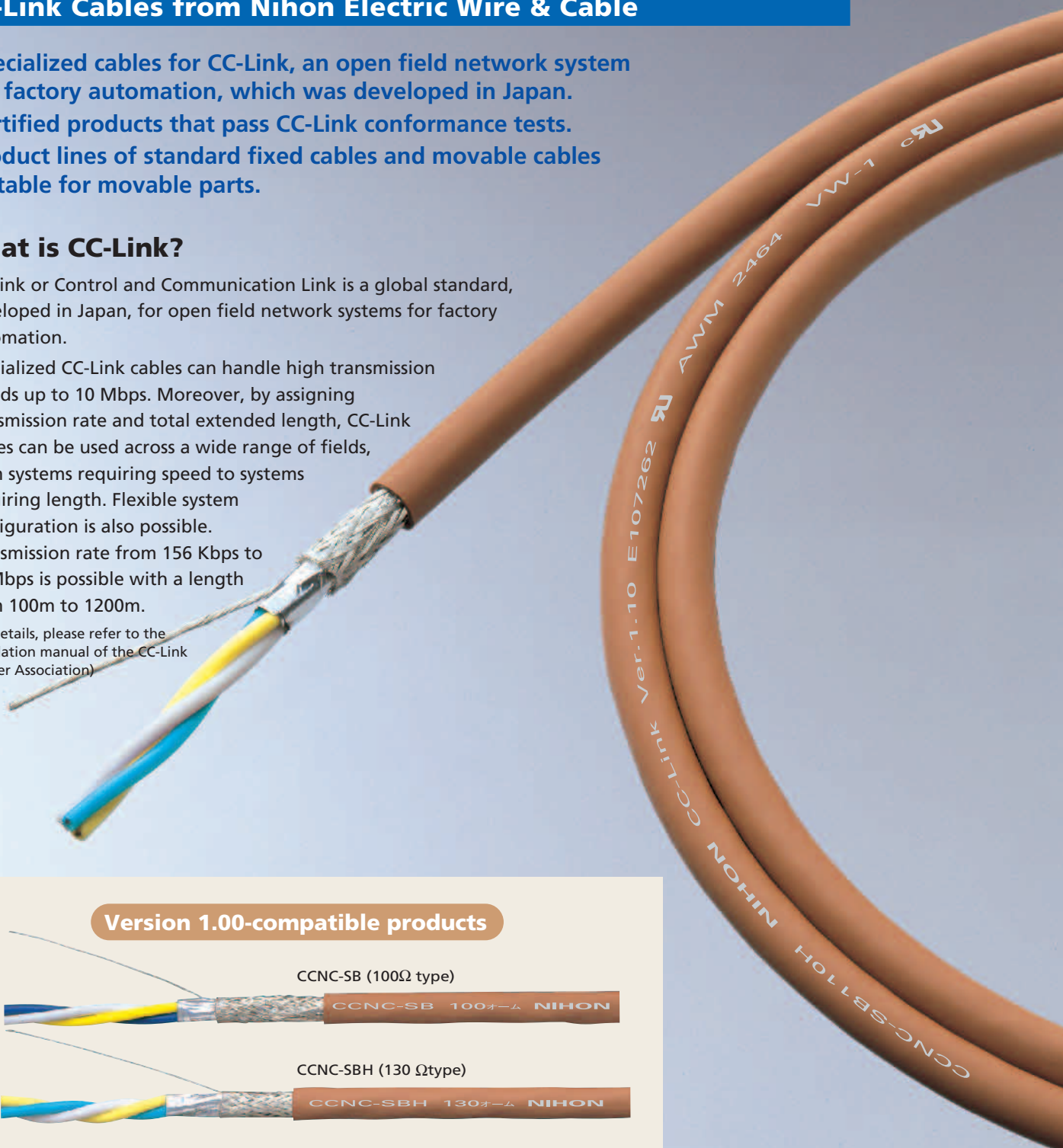
CC-Link Cables from Nihon Electric Wire & Cable

- Specialized cables for CC-Link, an open field network system for factory automation, which was developed in Japan.
- Certified products that pass CC-Link conformance tests.
- Product lines of standard fixed cables and movable cables suitable for movable parts.

What is CC-Link?

- CC-Link or Control and Communication Link is a global standard, developed in Japan, for open field network systems for factory automation.
- Specialized CC-Link cables can handle high transmission speeds up to 10 Mbps. Moreover, by assigning transmission rate and total extended length, CC-Link cables can be used across a wide range of fields, from systems requiring speed to systems requiring length. Flexible system configuration is also possible. Transmission rate from 156 Kbps to 10 Mbps is possible with a length from 100m to 1200m.

(For details, please refer to the installation manual of the CC-Link Partner Association)



Version 1.00-compatible products



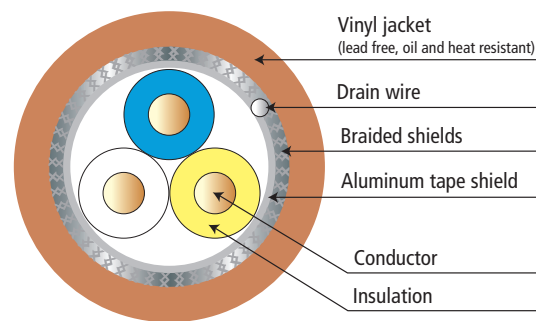
Applications and Model Numbers

Select from the following four product lines depending on the specific version of the CC-Link system, the characteristic impedance and application.

Model No.	Characteristic impedance	Version	Application
CCNC-SB110H	110Ω	Ver. 1.10,	Fixed
CCNC-SB110SF-5		Ver. 2.0	Movable
CCNC-SB	100Ω	Ver. 1.00	Fixed
CCNC-SBH	130Ω		

* For future CC-Link installation, we recommend products compatible with Ver. 1.10 or Ver. 2.0.

Cross Section



Features

- Easy to handle with excellent flexibility, nonflammable and oil, heat and noise resistant.
- UL and cUL compliant CCNC-SB110H can be used overseas.
- Cables with eco-material specifications using flame retardant polyethylene jacket are available.
- Transmission distance of CCNC-SB110SF-5 cable for movable use is 50% less than CCNC-SB110H, Ver. 1.10 standard cable. (at 10 Mbps, up to 50m)
- CCNC-SB110H+PW composite cable with built-in power line combines a Ver. 1.10 standard cable and two 0.75 mm DC 24V power lines. Power lines can be used to supply power to equipment such as remote I/O devices while reducing wiring. Outer diameter is approximately 12 mm.

Structural and Electrical Properties

Item	Specification			
	CCNC-SB110H	CCNC-SB110SF-5	CCNC-SB	CCNC-SBH
Model No.	CCNC-SB110H	CCNC-SB110SF-5	CCNC-SB	CCNC-SBH
Version	Ver. 1.10, Ver. 2.0		Ver. 1.00	
Conductor size × number of cores	20 AWG × 3C	0.5 mm ² × 3C		
Conductor resistance (20°C)	37.8Ω/km or less			
Insulation resistance	10000M Ωkm or greater	2500M Ωkm or greater	10000M Ωkm or greater	
Test voltage	AC 1500V per minute	AC 350 or DC 500V per minute		
Capacitance (1 kHz)	60 nF/km or greater			40 nF/km or greater
Characteristic impedance (1 MHz)	110 ± 15Ω		100 ± 15Ω	130 ± 15Ω
Outer diameter	Approx. 7.6 mm	Approx. 8.0 mm	Approx. 7.0 mm	Approx. 8.0 mm
Weight and volume	Approx. 70 kg/km	Approx. 75 kg/km	Approx. 65 kg/km	

Precautions

- Do not use standard fixed cable for movable use; this could negatively affect performance and damage the cable.
- Use CCNC-SB110SF-5 movable cable for movable use wiring.
- Be sure to follow these installation and operation guidelines.
Installation and operation that exceeds maximum tensile load and minimum bending radius will negatively affect performance and damage the cable.

Model No.	CCNC-SB110H	CCNC-SB110H+PW	CCNC-SB110SF-5	CCNC-SB	CCNC-SBH
Maximum tensile load	11 kg	22 kg	10 kg		
Minimum bending radius	Installation	120 mm	80 mm	70 mm	80 mm
	Operation	30 mm	48 mm	32 mm	32 mm

* Minimum bending radius of movable cable is 80 mm.

- Do not use cables with different system versions or characteristic impedance values.

* Specifications are subject to change without notice due to product improvements.