

# HB01 Series (Waterproof Cable-to-Cable Connector)

## Waterproof Cable-to-Cable Connector for industrial machinery



Recently, robots and other industrial machinery are becoming increasingly compact, multi-axis and multi-functional, and the wiring inside the devices more complex.

There are also growing demands for waterproof performance to be utilized in several different types of environments.

The HB01 Series connector is a waterproof cable in-line type connector to cater to these demands.

## Features

- Hybrid structure that enables both power and signal.
- Terminals are compatible with a wide range of cable sizes, AWG #24 to 14
- Mechanical locking structure ensures secure mating and an audible click at mate.
- Connector's back cover acts as a terminal guide.
- IP67 rated, water and dust proof when mated.

## Applications

Robotics, machine tools, servo motors, and other various industrial machinery.

## Documents

### Catalog

- [Industrial Connectors Selection Guides](#)
- [HB01 Series \(Waterproof Cable to Cable Connector for Outdoor Equipment\)](#)

## General Specifications

<b>Number of Contacts</b>	6 pos. (4 Power, 2 Signal)
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<b>Rated Current (Power, Per Contact)</b>	9 A (18 AWG) 11 A (16 AWG) 13 A (14 AWG)
<b>Rated Current (Signal, Per Contact)</b>	2 A (24 AWG) 3 A (22 AWG) 4 A (20 AWG)
<b>Rated Voltage</b>	A.C, DC 250 V (Power terminal and Signal terminal have enhanced insulation structure)
<b>Contact Resistance</b>	10 milliohm max. (initial) 20 milliohm max. (posttest)
<b>Insulation Resistance</b>	5,000 megohm min. (initial) 5,000 megohm min. (posttest)
<b>Dielectric Withstanding Voltage</b>	1,500 Vr.m.s.
<b>Applicable Cable (Power)</b>	Barrel size: #17, AWG: 19 to 17, Insulation outer dia.: 1.6 to 2.3 mm Barrel size: #14, AWG: 16 to 14, Insulation outer dia.: 2.1 to 2.8 mm
<b>Applicable Cable (Signal)</b>	Barrel size: #22, AWG: 24 to 22, Insulation outer dia.: 1.1 to 1.5 mm Barrel size: #19, AWG: 21 to 19, Insulation outer dia.: 1.2 to 1.8 mm
<b>Terminal Retention Strength</b>	Power terminal: 50 N min. Signal terminal: 30 N min.

<b>Durability</b>	30 mating cycles
<b>Operating Temperature Range</b>	-25 Deg. C to +85 Deg. C

### Notice

1. The values specified in this web site are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products.

For purchase, a product specification must be agreed upon.

2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.

3. The products presented in this web site are designed for the uses recommended below.

We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1) Applications that require consultation:

- \* Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:

Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster evention equipment, etc.

- \* We may separately give you our support with a quality assurance program that

you specify, when you think of a use such as :

Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2) Recommended applications include:

\*Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc