

JN1V/JN2V Series (Waterproof Circular Connector)

Small Circular One-touch Locking Waterproof Connector With Enhanced Vibration Resistance



JN1V/JN2V Series connectors come in the same form factor and dimensions as our conventional JN1/JN2 Series. The contact structure of this new series has been modified to improve the reliability under higher vibration. The five-point contact structure enhances the contact reliability and maintains a stable connection under vibrating conditions. Being able to withstand 245m/s^2 (25G), the JN1V/JN2V Series will withstand 2.5-times higher shock and vibration compared with the conventional JN2 Series connectors.

The JN1V/JN2V Series can be widely used as a compact waterproof I/O connector for servo motors for robots, automation machines, machine tools, and other industrial equipment, which are becoming diverse and required to have environmental performance.

Features

- Superior contact reliability achieved with a multi-contact structured socket contact with high vibration resistance.
- Compliant with 245 m/s^2 (25G) vibration condition
- Designed to mate with standard JN1/JN2 receptacle connectors
- Utilizes same semi-automatic crimping tool (applicator) as JN1/JN2 contacts (Requires manual crimping tool exclusive to JN2V)
- One-touch, push-and-twist, lock mechanism
- IP67 rated dust and waterproof (when mated)
- The right angle plug can be set in four different 90 degree increment cable orientations
- JN1V is an all-plastic type, and JN2V is an robust type partially using metal parts

Applications

Servo motors, semiconductor manufacturing equipment, communication equipment, measurement, and various industrial equipment, such as robots, automation machines, machine tools, which all require vibration resistance and waterproofness.

General Specifications

Number of Contacts	10 position
Rated Current	3 A/position (#22 size contact)

Rated Voltage	230 VAC
Dielectric Withstanding Voltage	900 VAC (1 minute)
Insulation Resistance	1000 megohm or more (500VDC applied)
Vibration Resistance	245 m/s ² peaks, 10 to 500 Hz, 3 hours for each 3 axes (total 9 hours)
Durability Mating Cycles	500 cycles
Waterproof Performance	IP67 (in mated condition)
Operating Temperature Range	-20 deg. C to +125 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