

Product Overview

Coming
Soon

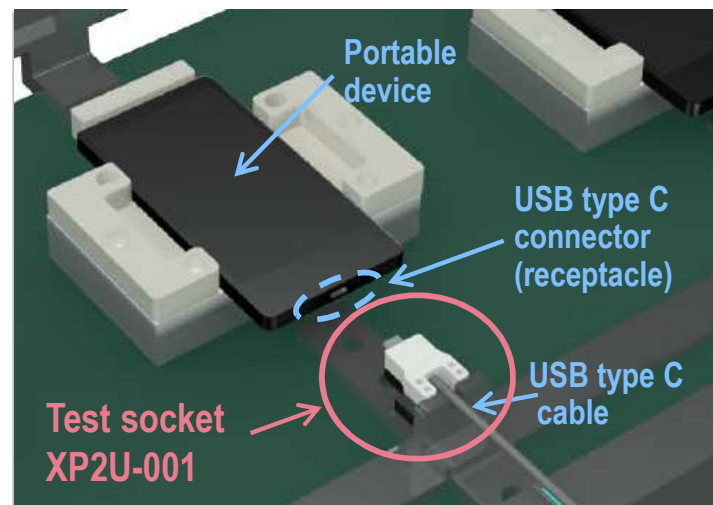
Long-Life Test Socket for USB Type C Connector Mounted Devices

XP2U-001

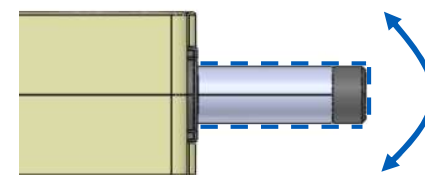
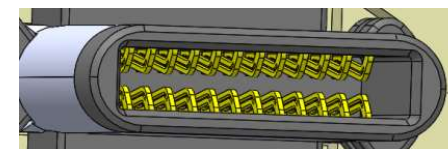


■ What's New?

XP2U-001 is a **long-life test socket** mainly for portable devices.



- Specially developed for **in-line testing fixtures** of device production lines, based on customer's requirements.
- Available with **USB 3.1 type C** connector.
- Adopts our **special electroforming contact pins** and **unique floating head structure**.



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■ Advantages for customers

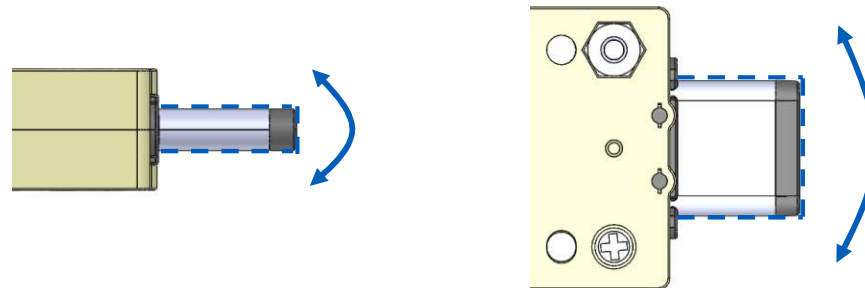
1. Minimal maintenance with a high durability socket.

High durability: 20 times* stronger than conventional sockets

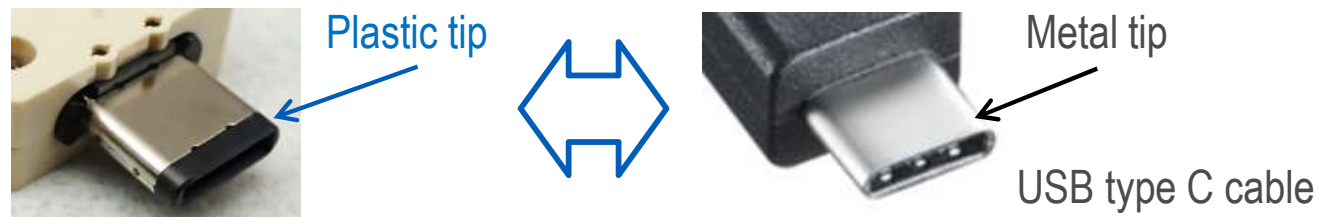
*Based on Omron evaluation as of June 2019

2. Suppress machine stops in the electrical testing process.

The floating head structure allows an insertion error of testing mechanism.



3. Hard to damage test products by the plastic tip and the floating head.



■ Performance overview

XP2U-001 has superior performance in 3 main requirements of customers such as high durability, no damage to test products, and low insertion force.

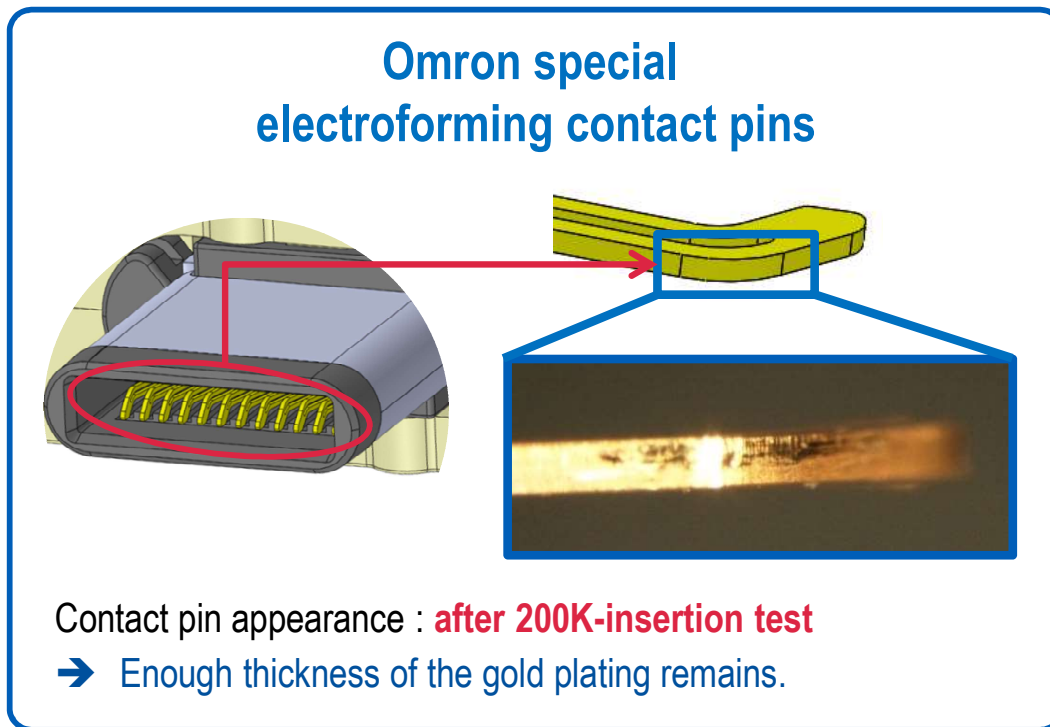
Performance comparison with other sockets

Customer requirements	Conventional test sockets	General USB cable	XP2U-001
High durability Number of insertions and removals	3k to 10K	3K * The specification sheet specifies 10k min.	200K or more
Damage to test products	Low possibility * Plastic tip	High possibility * Metal tip	Avoidable * Plastic tip / floating head
Insertion force	Low * Non-lock structure	High * Lock structure	Very low * Special electroforming contact pins / Non-lock

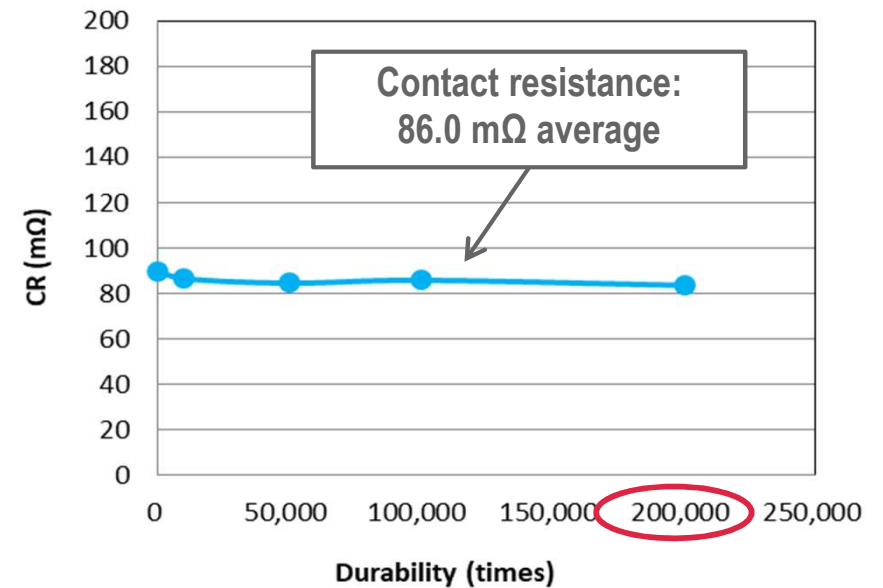
■ Performance details

(1) High durability

The high durability performance of XP2U-001 is achieved by an adoption of our special electroforming contact pins which are made of highly solid material and have superior spring characteristics.



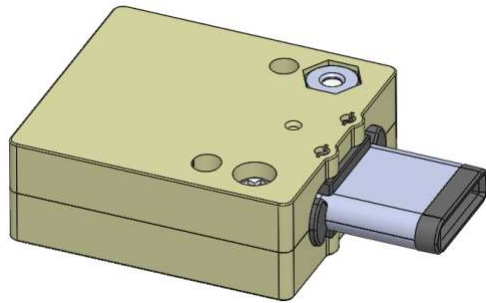
Insertion and removal test results



■ Performance details

(2) No damage to test products

Prevention of product damages is achieved by two distinct special structures. One is a plastic tip instead of the metal tip of general USB connector cables. The other is our specially designed floating head mechanism.

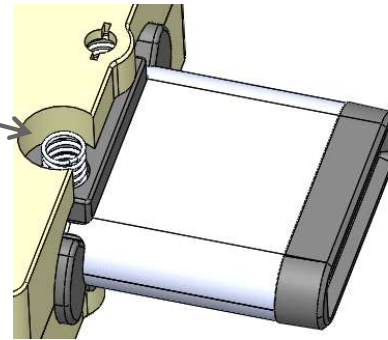


Adoption of a plastic tip

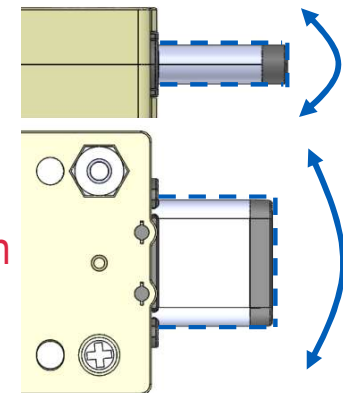


Omron special floating head mechanism

Coil spring



Movable range:
approx. 1 degree
in X,Y direction.



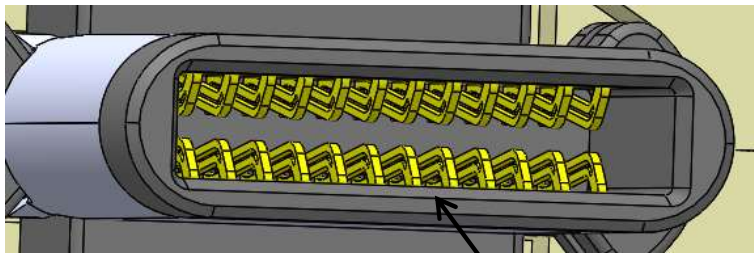
This floating head structure also allows insertion errors in automatic testing process to prevent machine stops.

■ Performance details

(3) Low insertion force

The insertion force of XP2U-001 is 5 to 7 times less than that of a general USB cable. This low insertion force can significantly reduce the burden of workers in manual testing lines.

Omron special electroforming contact pins



Non-lock structure

Our special electroforming contact pins for XP2U-001 have distinct shapes to create superior spring characteristics.


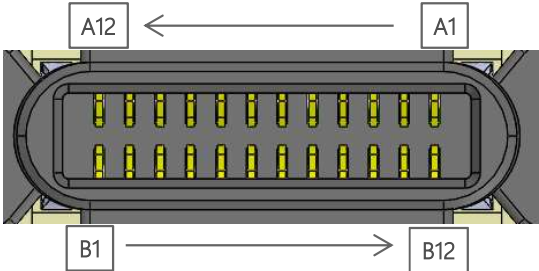
This design provides low insertion force without sacrificing contact reliability.

Insertion force test results

Unit: N

	General USB cable	XP2U-001
Average	11.7	1.6
Max.	11.9	2.1
Min.	11.1	1.3

■ Main product specifications

Type	XP2U-001	
Appearance / Outline dimensions		<p>Body size: 19.3 mm* X 17.2 mm X 7 mm</p> <p>*except connector</p>
Rated current	<ul style="list-style-type: none"> Terminal # A1,A4,A9,A12,B1,B4,B9,B12: 1.25 A max. The other terminal: 0.25A max. 	
Rated voltage	20 VAC/VDC max.	
Ambient operating temperature	5 to 40 degrees C	



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