



Harwin Test Report Summary

HT01501

Environmental Testing of Datamate
(M80 Series) J-Tek and 101Lok Connectors

Datamate

A decorative graphic consisting of numerous thin, red, wavy lines that flow across the bottom half of the page, creating a sense of motion and depth.

1. Introduction.

1.1. Description and Purpose.

The Harwin Datamate (M80 Series) connector is manufactured to the requirements of BS9525-F0033. The following environmental tests (Bump, Vibration and shock) were carried out to ensure fixing hardware used on the J-Tek range, including the 101Lok design, secured connectors fully throughout test conditions.

1.2. Conclusion.

The following data has been collated from Harwin test report 510. The connectors successfully performed in accordance with the specification, and can be accepted as products within the Datamate range.

2. Test Method, Requirements and Results.

2.1. List of Test Samples.

- a) M80-5000642 – Male Vertical PC Tail J-Tek with jackscrew
- b) M80-4610605 – Female Crimp J-Tek with jackscrew
- c) M80-5T10605MC – Male Vertical PC Tail J-Tek with 101Lok
- d) M80-4CI0605FC – Female Crimp J-Tek with 101Lok

2.2. Specification Parameters.

In accordance with BS9525 F0033 Iss 1: Group CD6(i)(D) – 5 mated pairs:

| Test | BS9520 | Parameters |
|--------------------|-----------|---|
| Bump | 1.2.6.2 | BS2011: Part 2.1 Eb: 1977 390 m/s ² (40g) 6ms, 4000 ±40 Bumps, both directions of three axis, continuously monitoring of electrical continuity during the last 200 bumps. |
| Vibration: General | 1.2.6.3.1 | BS2011: Part 2.1 Fc: 1977 10Hz to 2kHz 0.75mm pk/10g, duration 6 hours total (2h/axis), continuously monitoring of electrical continuity during initial resonance search and the last two frequency sweeps. |
| Shock | 1.2.6.4 | BS2011: Part 2.1 Ea: 1977 981 m/s ² (100g) 6ms Trapezoidal pulse, both directions of three axis, 18 shocks total, continuously monitoring of electrical continuity during application of shocks. |

2.3. Test Method and Results.

The following tests were all carried out in a mated condition. There were no vibration responses detected during the vibration test, and there were no mechanical defects observed during post test visual inspections of the test items.

| Sample | Jackscrew (a & b) | 101Lok (c & d) |
|-----------------------|-------------------|----------------|
| Bump (1.2.6.2) | OK ✓ | OK ✓ |
| Vibration (1.2.6.3.1) | OK ✓ | OK ✓ |
| Shock (1.2.6.4) | OK ✓ | OK ✓ |