BELL FRUIT ONLY.
THIS SPECIFICATION CREATED SPECIFICALLY FOR BELL FRUIT AND THEIR ∅ WIRE.
AWG 7/0.2 INS ∅ 1.15MM
NOT TO BE ISSUED TO ANY OTHER CUSTOMER. UNLESS TEST REPORT VERIFIES THE SAME PARAMETERS.
G. HART 26 SEP 84

1.0 SCOPE

1.1 This specification outlines the performance capabilities of the 2.54mm centre insulation displacement connector designed for use with rigid wire 0.64 mm square.

2.0 PRODUCT SPECIFICATION

2.1 The JFKK 2.54mm connector family consists of the following assemblies: -

Part No.	Description
A-7690S-*N*	Harness Board Assembly 2.54 centres
A-7720S-*N*	Non-Harness Board Assembly 2.54 centres

2.2 For circuit availability, displacement slot selection and dimensions, refer to individual Sales Drawings.

3.0 RECOGNISED AGENCY APPROVALS:

3.1 Underwriter's laboratories Inc. - Applied for

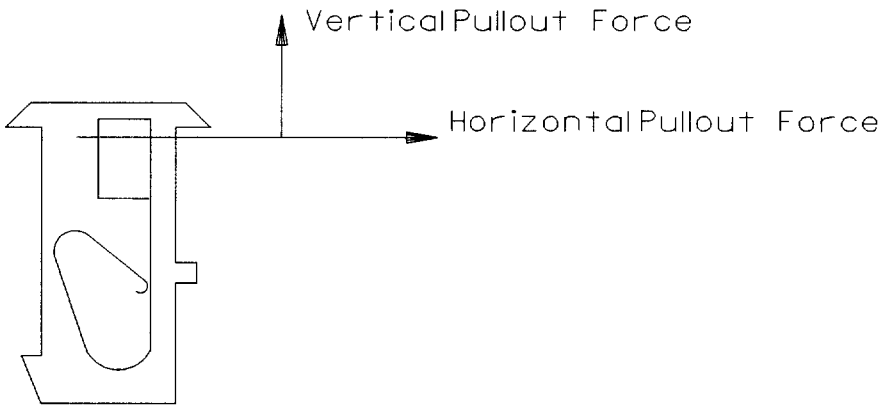
4.0 MECHANICAL SPECIFICATION:

4.1 Material (For alternate materials and platings consult factory)
- 4.1.1 Housing and Keys: Available in U.L. Rated 94V-2 Nylon
- 4.1.2 Terminal: CDA Alloy 260 Brass (DIN Ref. Cu Zn 30)
  - 4.1.2.1 Plating: Hot Tin/Lead Dip (60/40) 1.0 - 2.5 µm

4.2 Wire: 24 AWG Stranded, 7/0.2, Insulation Diameter -1.15mm

4.3 Terminal to housing retention: 3.63kg min.

4.4 Wire pullout forces: (Discrete wire)



AWG Type	Min Horizontal Pullout Force	Min Vertical Pullout Force
24 Stranded - 7/0.2	22N 5lbs f	13N 3lbs f

4.5 Engage/Disengage Forces:
A 0.64mm square polished steel pin shll initially engage connector with less than 350 grammes and disengage with more than 200 grammes.

4.6 Normal Force: At working height of terminal is 240 grammes min.

5.0 ELECTRICAL SPECIFICATION:

5.1 Raged Voltage: 250 Volts

5.2 Rated Current: At 105 °C Max Temp
24 AWG 3.5 Amps Max

5.3 Contact Resistance:
Measured approximately 3.0mm from bottom of wafer through the connector to a point on the wire approximately 250mm from the housing.

Wire AWG	Average initial resistance
24	24 m Ω

5.4 Dielectric Strength:
Connector withstands 1500 volts RMS applied between adjacent terminals for 60 seconds without breakdown.

5.5 Insulation Resistance: Greater than 200K megohms.

6.0 ENVIRONMENTAL TESTING

Maximum resistance change for any test listed below to be 10 milliohms.

6.1 Humidity:
(Per MIL-STD-202E, Method 103B, Condition A) - 240 hours exposure @ 40 °C, 95% relative humidity.

6.2 Salt Spray:
(Per MIL-STD-202E, Method 101D, Condition A) - 94 hours exposure to a 5 salt spray solution @ 35 °C.

6.3 Thermal Shock:
5 cycle between extremes of -20 °C and +105 °C with ½ hour dwell in each extreme.

6.4 Temperature Life:
240 hours of exposure to an ambient temperature of 105 °C.

6.5 Physical Shock:
(Per MIL-STD-202E, Method 213B, Condition A) six hits along 3 mutually perpendicular planes. The peak value of the shock was 50 G's of force with a half sine wave pulse for a duration of 11 milliseconds.

6.6 Vibration: (Per MIL-STD-202E, Method 201A)

A)	Frequency Range:	10-55 Hertz
B)	Excursion:	1.52 mm
C)	Sweep Time:	10-55-10 Hertz in 1 minute
D)	Duration:	2 hours in each of 3 mutually perpendicular planes.

6.7 Corrosive Atmosphere
1 hour exposure to nitric acid vapour immediately followed by 15 minutes exposure to ammonium sulphide vapour.