

# Harsh Environment Connectivity Solutions



# 1/4" 3 Conductor Open Frame Jacks

Littel-Jax phone jacks mate with standard commercial phone plugs and are available with .25 inch inside diameter bushings.

#### **MECHANICAL**

Life: Commercial Jacks - 10,000 insertion/withdrawal cycles, minimum. Military Jacks - 20,000 insertions/withdrawals, minimum.

Mechanical Shock: Military Jacks - Per MIL-STD 202, method 213, Test Condition H (75g).

Vibration: Military Jacks - Per MIL-STD-202, method 213, (10-55 Hz).

Insertion/Withdrawal Forces: (see charts below)

| Commercial Jacks       |       |       |  |  |
|------------------------|-------|-------|--|--|
| Plug Diameter (inches) | .210  | .250  |  |  |
| Insertion<br>(maximum) | 7 lb. | 7 lb. |  |  |
| Withdrawal (minimum)   | 1 lb. | 1 lb. |  |  |

Military Jacks

| Part Number          | C11   | C12A  | C12B    |
|----------------------|-------|-------|---------|
| Insertion (maximum)  | 6 lb. | 7 lb. | 6 lb.   |
| Withdrawal (minimum) | 2 lb. | 3 lb. | 1.5 lb. |
| Withdrawal (maximum) | 7 lb. | 7 lb. | 5 lb.   |

#### ELECTRICAL

Contact Resistance: Commercial Jacks - .030 ohms maximum (initial), .050 ohms maximum (after humidity, durability exposure). Per MIL-STD-202E. Military Jacks - .010 ohms maximum (initial), .020 ohms maximum (after life), .10 ohms maximum (after salt spray).

Insulation Resistance: Commercial Jacks - 10,000 M(omega) minimum (initial), 1,000 M(omega) minimum (after humidity). Military Jacks - 10,000 M(omega) minimum (initial), 1,000 M(omega) minimum (after humidity, durability exposure).

Dielectric Withstanding Voltage: 500 V, 60 Hz (rms) AC.

Contact Rating: 1 A, 25 V DC.

## **ENVIRONMENTAL**

Thermal Range: Commercial Jacks; -55°C to +85°C (non-operating); -20°C to +65°C (operating). Military Jacks; -55°C to +85°C (non-operating); -40°C to +65°C (operating).

Thermal Shock: Commercial Jacks - Per MIL-STD 202, method 107. Military Jacks - Per MIL-STD 202, method 107.

Humidity: Commercial Jacks - Per MIL-STD 202, method 106. Military Jacks - 0% to 95% operating and non-operating.

Salt Spray: Commercial Jacks - Per MIL-STD 202, method 101. Military Jacks - Per MIL-STD 202, method 101 (48 hours).

Moisture Resistance: Military Jacks - Per MIL-STD 202, method 106 (240 hours).

## MATERIAL

Mounting Bushing: Nickel-plated copper alloy.

Insulation: Rigid plastic.

Springs: Special copper alloy. Integral contacts are standard in the isolated switching circuits; fine silver contacts in C12A switching circuit.

Sleeve Terminal: Copper alloy.

Hardware: Supplied with one Number P10001 cop