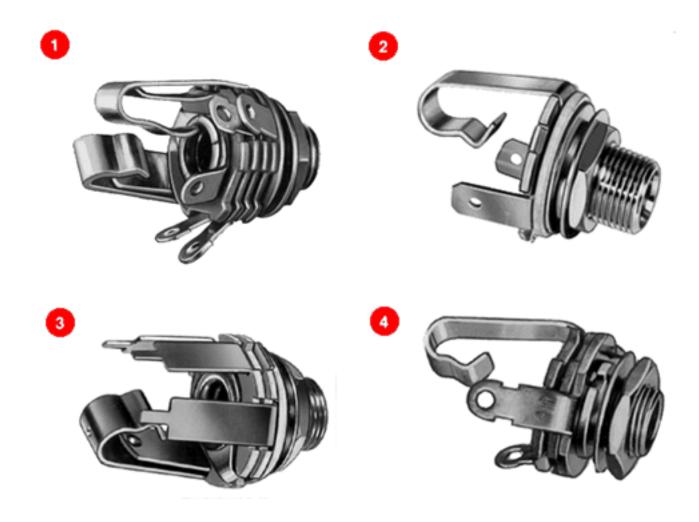
# **Switchcraft**®

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# 1/4" PHONE JACKS

- 1. 14B
- 2. FAL-11 .205 FASTON TERMINAL
- 3. PC-12A
- 4. 11

click here to download a schematic drawing

click here to download a schematic drawing

(you will need to have Adobe Acrobat installed on your system to do this)



#### Littel-Jax® COMMERCIAL PHONE JACKS

#### 2- and 3-CONDUCTOR

Littel-Jax phone jacks mate with standard commercial phone plugs and are available with .25 inch and .21 inch inside diameter bushings.

#### MIL Littel-Jax® PHONE JACKS

### 2- and 3-CONDUCTOR MIL-SPEC, MIL-J-641 (E)

MIL jacks mate with MIL-type phone plugs with .25 inch (6.35mm) or .21 inch (5.34mm) diameter bushings. Numbers C11 and C12B have a non-turn locating pin which keys the jack to the mounting surface. For low contact resistance applications, jack number C12A has fine silver contacts on shunts and tip springs.

### **MOUNTING**

Chassis/Panel: See Mounting Data drawing below; small

hole is required only for jacks numbers C11 and C12B

with non-turn locating pin.

Maximum Panel Thickness: .156 inch (4mm) for standard

.276 inch (7mm) long bushing; .25 inch (6.35mm) for .375

inch (9.5mm) long bushing.

**NOTE:** For panels thicker than .25 inch see Thick Panel

Phone Jax.

**Insulated Mount:** See drawing. S1028 flatwasher and Part Number S1029 shoulder washer must be

ordered separately for mounting in .437 inch diameter hole.

**NOTE:** See Hi-D Jax® for jack specifically designed

for insulated mounting without additional washers.

PC Board Mounting: See Recommended PC Board Layout

drawing below for jacks with PC terminals. Recommended

PC board thickness is .062 inches.

Mounting Centers: 1.188 inch (30mm) recommended.

Centers may vary with jack selected, for example, Number

11 mounts on .813 inch (20.6mm) and 14B mounts on 1.125 inch (28.6mm) minimum centers.

| PREFIX OPTIONS                                  | SERIES             | CIRCUITRY |
|---|--------------------|-----------|
| Blank- 1/4" Commercial                          | Jack 1-Littel Jax® | 1- I      |
| C- Accepts Mill Plug                            |                    | 2A- III   |
| FA205" Faston Terminals                         |                    | 2B- IV    |
| FAL205" Faston Terminals and .375" Long Bushing |                    | 3- V      |
| L375" Long Bushing                              |                    | 3A- VI    |
| PC- PC Terminals                                |                    | 3B- VII   |
| S- Accepts .206 Diameter Plugs                  |                    | 3E- IX    |
|   |                    | 4B- XII   |

| TWO CONDUC  | CTOR PART NUMBERS |                             |                        |
|-------------|-------------------|-----------------------------|------------------------|
| Part Number | Description       | Jack Schematic <sup>1</sup> | Typical Mating<br>Plug |
|             |                   |                             |                        |

|   |  |     | -    |  |  |
|---|--|-----|------|--|--|
| 11  | Open circuit                                     | I   | 250  |  |  |
| C11   | MIL Number M641/6-1                              | I   | 440  |  |  |
| FA11  | .205 inch FASTON terminal                        | I   | 250  |  |  |
| FAL11   | .375 inch long bushing<br>.205 FASTON terminal   | I   | 250  |  |  |
| L11   | .375 inch long bushing                           | I   | 250  |  |  |
| 12A   | Tip shunt  | III | 250  |  |  |
| C12A  | MILNumber M641/12-1                              | III | 440  |  |  |
| L12A  | .375 inch long bushing                           | III | 250  |  |  |
| PC12A   | PC board mount                                   | III | 250  |  |  |
| 13  | Isolated "make" circuit                          | V   | 250  |  |  |
| 13A   | Transfer circuit                                 | VI  | 250  |  |  |
| 13E   | Isolated "break" circuit                         | IX  | 250  |  |  |
| THREE CO  | NDUCTOR PART NUMBERS                             |     |      |  |  |
| 12B   | Double open circuit                              | IV  | 267  |  |  |
| L12B  | .375 inch long bushing                           | IV  | 267  |  |  |
| C12B  | MIL number M641/5-1, .210 inch inside diameter   | IV  | 480  |  |  |
| 13B   | Tip shunt  | VII | 267  |  |  |
| 14B   | Double closed circuit                            | XII | 267  |  |  |
| PART NUM  | PART NUMBERS (.210 inch inside diameter bushing) |     |      |  |  |
| S11   | 2 conductor                                      | I   | S250 |  |  |
| S12A  | 2 conductor                                      | III | S250 |  |  |
| S12B  | 3 conductor                                      | IV  | S267 |  |  |
| S13B  | 3 conductor                                      | VII | S267 |  |  |
| 1 Refer to jack schematics on pages 65 and 66. Other circuits are available; contact factory. |  |     |      |  |  |

## **SPECIFICATIONS**

## **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)

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

| Military Jacks       |            |       |             |  |
|----------------------|------------|-------|-------------|--|
| Part Number          | <b>C11</b> | C12A  | <b>C12B</b> |  |
| 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 copper alloy

nickel-plated hex nut, and one Number S1022 steel

nickel-plated washer - except copper alloy nickel-plated washer

Number **S10451** supplied on C11, C12A and C12B.

\* Commercial jacks feature integral contacts. Integral contacts should not be used where low contact resistance is a requirement.

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## To search a category please click on the corresponding icon:



| Connectors | Jacks and Plugs |

| Patch Panels, Patch Kits & Jackfields | Cable Assemblies and Patch Cords | Switches |

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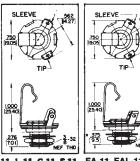
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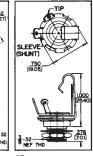
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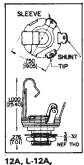
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#### 1/4" PHONE JACKS

#### Littel Jax® Jacks







11, L-11, C-11, S-11 FA-11, FAL-11 \*.276 in. for No. FA-11

12

S-12A, SC-12A

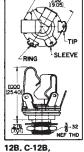
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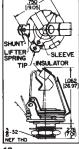
SLEEVE (813)

3 32 225

NEF THO

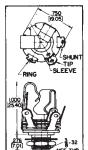
PC-12A

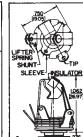






C-12A 12B, C-12B, S-12B, SC-12B





13E

