

# SWITCHCRAFT CONXALL

## Harsh Environment Connectivity Solutions

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### 1/4" 2 Cond Enclosed Jack

Hi-D Jax® 2- and 3-conductor enclosed phone jacks are ideal for panel/chassis and PC board mounting. Unitized molded housing protects springs, provides mechanical and electrical reliability, minimizes leakage and provides low capacity between springs. Mounts on .625 inch minimum centers in rows or arrays. .25 inch or .21 in inside diameter bushing types, metal or thermoplastic bushings (for insulated mounting). Insulated Hi-D Jax® jacks are specifically designed for in-circuit (insulated) mounting from mounting surface and have fully protected enclosed internal sleeve feature. Solder lugs or PC terminals may be selected.

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## Materials

- Mounting Bushing: Series M11\*, MS11\* - Nickel-plated copper alloy. Series MN11\*, MNS11\* - Molded thermoplastic.
- Housing: Molded thermoplastic, UL 94V-0.
- Springs: Copper alloy.
- Contacts (mil-type): Tip and Ring Springs are gold-plated. Shuntsprings (where used) are welded crossbar palladium. Welded crossbar gold alloy contacts are available on special order.
- Contacts (commercial): Tin-plated integral contacts.
- Sleeve Terminal: Steel, tin-plated.
- Hardware: Supplied with one P10001 copper alloy, nickel-plated locknut and one S10221 steel, nickel-plated washer.
- Mounting Bushing: Series 11\*, L11\*, S11\* - Nickel-plated copper alloy. Series N11\*, NL11\*, NS11\* - Molded thermoplastic over nickel-plated copper alloy sleeve.

## Mechanical

- Life: 10,000 insertion/withdrawal cycles, minimum.
- Insertion/Withdrawal Forces: Nominal plug retention on 2-conductor jack is .75 pounds with .5 pounds minimum. Nominal plug retention on 3-conductor jack is 2 pounds with 1.5 pounds minimum. With double tips, the nominal is 1.5 pounds and 1 pound minimum.
- Maximum Recommended Mounting Torque: 6" -lb. for thermoplastic bushing.
- Mounting Torque (for Spring Lock PC Terminal): 8" -pound for thermoplastic bushings.

## Electrical

- Contact Resistance: .020 ohms maximum (initial), .050 ohms maximum (after humidity, durability exposure). Per MIL-STD-202E.
- Insulation Resistance: 10,000 MO minimum (initial), 1,000 MO minimum (after humidity).
- Dielectric Withstanding Voltage: 500 V, 60 Hz (rms) AC.
- Contact Rating: 0.25, 48 VDC make and break, 3A carry only.

## Environmental

- Thermal Range: -55°C to +85°C (non-operating); -20°C to +65°C (operating).
- Thermal Shock: Per MIL-STD 202, method 107.
- Humidity: Per MIL-STD 202, method 106.
- Salt Spray: Per MIL-STD 202, method 101.

## Mounting

- Jacks mount in a single .375" diameter hole on .625" minimum centers. Series 11\*, N11\*, NS11\* and S11\* mount in panels up to .156" thick. Series L11\* and NL11\* (long bushing) mount in panels up to .25" thick. Jacks with PC terminals mount on PC boards up to .094" thick. Formed "shoulders" on each terminal provide stable stand-off mount. Threaded bushing permits mechanical connection to equipment panel. Mounting hardware is supplied. Also available is a grounding spur bushing, which allows for positive grounding of the bushing to the chassis. Contact factory for details.
- SERIES 11\* - 2- and 3-conductor types, threaded metal bushing .276" long. .25" inside diameter bushings.
- SERIES L11\* - Same as Series 11\*, except bushing is .375" long for mounting in panels up to .25" thick.
- SERIES N11\* - Same as Series 11\*, except bushing is molded thermoplastic for insulated mounting.
- SERIES NL11\* - Same as Series N11\*, except bushing is .375" long for insulated mounting in panels up to .25" thick.
- SERIES S11\* - Same as Series 11\*, except bushing has .21" inside diameter. Smaller diameter protects against accidental insertion of plugs with .25" diameter fingers.