Introduction to PC Tail Contacts

PC tail contacts are used exclusively for connectors that are mounted directly to printed circuit boards or flex cable by a specialized contact with a long termination “tail” that protrudes behind the connector body. PC tail contacts offer a number of design advantages by permitting the use of ruggedized connectors mounted to sophisticated electronics without the use of pigtails or bulky terminal blocks. Direct termination of contacts to PC boards also increases signal integrity and improves overall system reliability.

PC tail contacts differ from one another by the tail diameter and length. The tail length is the portion that extends beyond the main body of the contact and protrudes from the rear of the connector shell. In cases where the tail length extends beyond a design’s required minimum length, excess tail material can simply be trimmed with wire cutters after soldering and testing. Milnec also offers custom coax, twinax, or quadrax PC tail contacts to accommodate high-frequency contact requirements.

Jam Nuts for PC Tail Contact Applications

While PC tail contacts can be used in any shell style, we recommend the use of jam nut receptacles when using PC tail contacts for PC board applications. Jam nut receptacles are designed for rear mounting and enable simpler installation on the enclosure. Their single-hole mounting design also reduces the number of environmentally susceptible openings that must be made, while the integrated O-ring maintains the environmental integrity of the enclosure. Protective covers are highly recommended to provide environmental and EMI/RFI protection when connectors are unmated. Socket contacts (which are recessed in the insert) are recommended for use as PC tail contacts in order to avoid accidental electrostatic discharge to contacts attached to sensitive electronics.

Custom PC Tail Lengths & Dimensions

We realize that every engineering application is different, that’s why we’re able to provide custom PC tail contacts to fit any design. Options include custom tail lengths, shoulder extensions, or 90° angled configurations.

For applications requiring high-speed data transmission, we can also provide coax, twinax, and quadrax contacts with PC tails for termination directly to your PC board to provide the highest signal integrity. Please contact an authorized distributor for ordering assistance.
### TX07 N 13-35 Y N - 02

- **Basic Part Number**
  - TX00: Wall mount receptacle
  - TX07: Jam nut receptacle

- **Material & Finish**
  - N: Aluminum, electroless nickel
  - W: Aluminum, olive drab cadmium
  - K: Stainless steel, passivated (firewall)

- **Shell Size & Insert Arrangement**
  - See Insert Arrangement Selection table, p. B-19

- **Contact Style**
  - X: PC tail pins
  - Y: PC tail sockets

- **Alternate Keying**
  - N: NORMAL or A, B, C, D, E

### Optional Accessory Kit (Omit For None)
- 02: Protective cover + mounting gasket
- 03: 02 kit + mounting bracket + sealing screws

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**Order receptacles with PC tail contacts**

PC tail contacts are used to mount ruggedized connectors directly to printed circuit boards or flex cable. To include PC tail contacts with your connector, simply select the X or Y option for contact style. Custom PC Tail contact angles and sizes are available by special order. Insert arrangement diagrams are available with precise hole locations for PCB manufacturing.

### PC Tail Contacts

<table>
<thead>
<tr>
<th>Contact Type</th>
<th>Part Number</th>
<th>Size</th>
<th>Tail Dia</th>
<th>Tail Length</th>
<th>TX00 Shoulder Extension</th>
<th>TX07 Shoulder Extension</th>
<th>TX00 Overall Extension</th>
<th>TX07 Overall Extension</th>
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For insertion and extraction tools, please see the Contacts, Sealing Plugs, & Tooling table, p. B-10.

Dimensions are in inches (mm). † Overall extension ± 0.010 (0.3).