DIP Connectors

The CW Dual-In-Line Plug (DIP) connector is used for rapid, permanent connection of ribbon cable to a PC board or to a standard DIP socket when connect/disconnect capabilities are required. The cover is factory preassembled to the connector base to simplify assembly to cable and has ridges for cable alignment. CW DIP connectors are Mil-DTL-83503/6 approved.



30 **CLU** INDUSTRIES • 130 James Way, Southampton, PA 18966 - 3838 • Telephone: (215) 355-7080 • Fax: (215) 355-1088 • www.cwind.com

Contact

Patented offset tines produce Torq-Tite[™] termination for added reliability.

Double barbs bite into plastic, retaining contact firmly in insulator.

Spring-temper phosphor bronze contact material resists breakage during bending or straightening operations.

• Two tail lengths are available for use with standard or low profile DIP sockets. .012 in. x .021 in. contact crosssection provides proper mating with a variety of DIP sockets.

DIP Connector Features

- Mil-DTL-83503/6 approved
- One-piece construction.
- 14, 16, 24, and 40 pin versions.
- Patented Torq-Tite[™] contacts, ensure reliable gas-tight terminations.
- Gold-plated phosphor bronze contacts, standard tin-lead plated contacts optional.
- Accepts 28-30 AWG stranded or solid conductors.
- Simple assembly bench press or low cost hand tool is all that's needed for terminating cable and connectors.
- All pin numbers clearly marked and legible before and after assembly. Numbering is arranged to meet MIL-DTL-83503 specifications for standard IC DIP numbering.
- Optional strain relief clips are easily installed. Allows top center, vertical cable routing to reduce possibility of damage to contact pins during removal of DIP from socket.
- Two contact tail lengths available .175 in. standard or optional 130 in. length for mating with low profile Dip Sockets.

Strain Relief

Optional metal strain relief straps are available. Connection is isolated from mechanical strain by the bend in the cable, as it is folded over the top of the assembled connector. The Strain Relief Strap is placed over the cable and snaps into a recess on the connector. A centralized top cable exit is created in the finished cable assembly.

Contact Identification

Every contact position is numbered, per Mil-DTL-83503, for easy identification. In addition, a beveled corner at pin #1 enhances orientation of the connector to the mating DIP Socket, even in blind installations.

Assembly

The CT200 DIP Hand Tool is designed to terminate out 14 and 16 pin DIP Connectors. It is easy to use, lightweight and compact, making it an ideal tool for field replacement work or low volume assembly applications. DIP connectors can also be assembled to cable using CW's CT301 76/84 Bench Press.







DIP Connectors

Engineering Dimensions



32 **CUU** INDUSTRIES • 130 James Way, Southampton, PA 18966 - 3838 • Telephone: (215) 355-7080 • Fax: (215) 355-1088 • www.cwind.com

Specifications and Ordering Information Specifications

• Contacts: phosphor bronze standard.

- Contact Plating: 10μ in. gold over 50μ in. nickel, standard; 30μ in. gold over 50μ in. nickel, optional; 50μ in. gold over 50μ in. nickel, optional; 100μ in. tin-lead optional
- Insulator Material: UL 94V-0 flame retardant glass filled thermoplastic
- Strain Relief Strap Material: tin-plated steel
- Color: blue

- Operating temperature: -55°C to +125°C
- Current Rating: 1A (maximum) per contact
- Dielectric Withstand Voltage: Greater than 500 Vdc at sea level
- Insulation Resistance: Greater than 5 x 10° ohms
- Mates with .050 in. centered round conductor flat cable and standard DIP socket with .100 in. x .300 in. or .100 in. x .600 in. contact spacing
- Cover pull off force, with strain relief 20 lb minimum (force along contacts' primary axes)



EXAMPLE: CWR-130-16-0002 is part number for a 16-pin DIP connector with .175 in. tails and 50µ in. gold over 50µ in. nickel contacts

How to Order DIP Cable Assemblies Cable assemblies with two DIP connectors (CWR-130-XX-0000) on a prescribed length of color-coded cable are available with connectors oriented per drawing 31-1. (#1 contacts oriented to BROWN (No. 1 Cond.) brown conductor.) For other lengths, orientations, numbers or combinations of DRAWING 31-1 connectors, contact the factory or your local value-added distributor. CA-XX-910X Final assembly length "L" 1=3"±1/8" 2=6"+1/8" 3=12"±1/4" Number of Conductors 4=24"±1/4" (14, 16, 24 or 40) 5=48"+1/4" How to Order Strain Relief Straps for DIP Connectors CWN-SR-XX **EXAMPLE: Strain Relief** (14 and 16)

