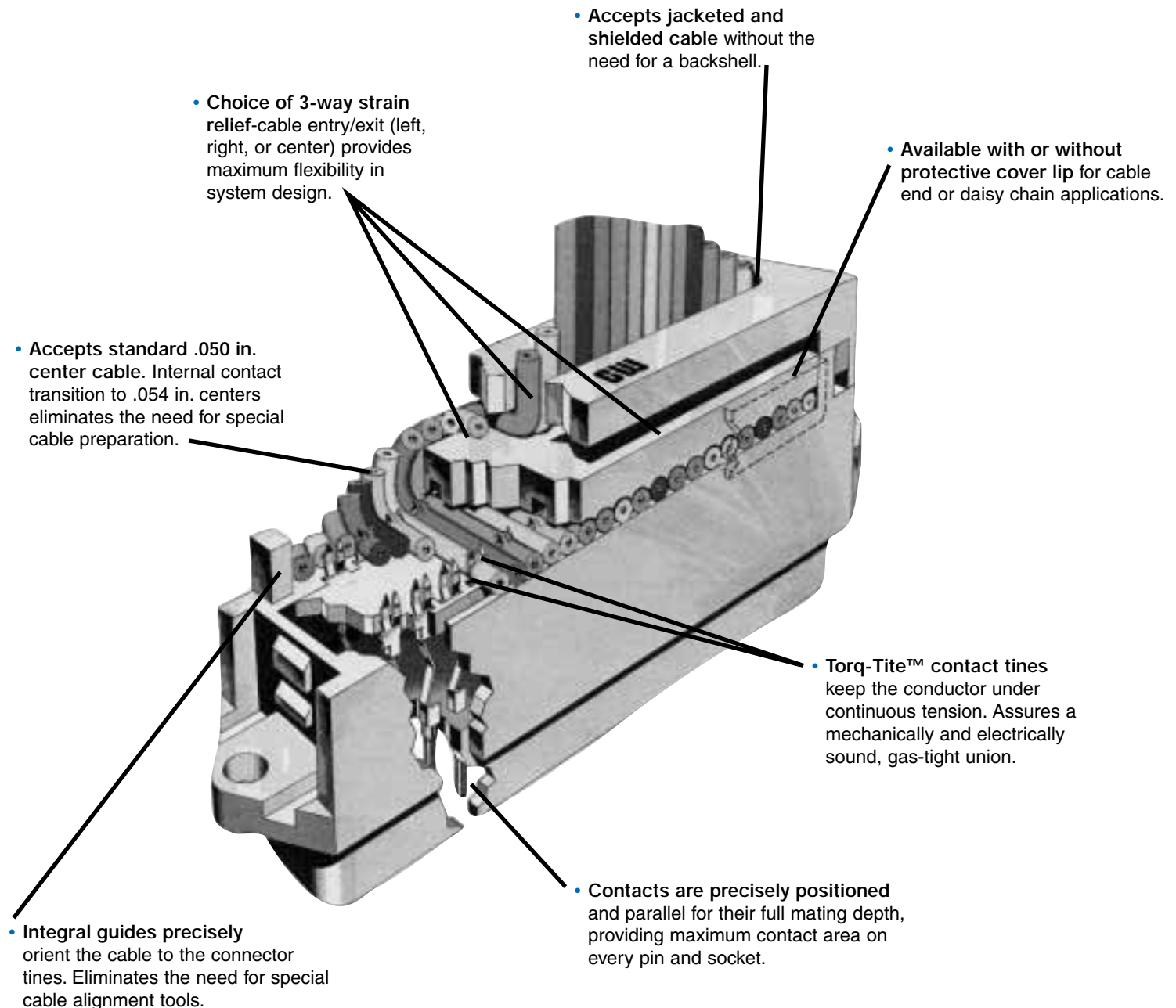


# D-Subminiature Connectors—All-Plastic

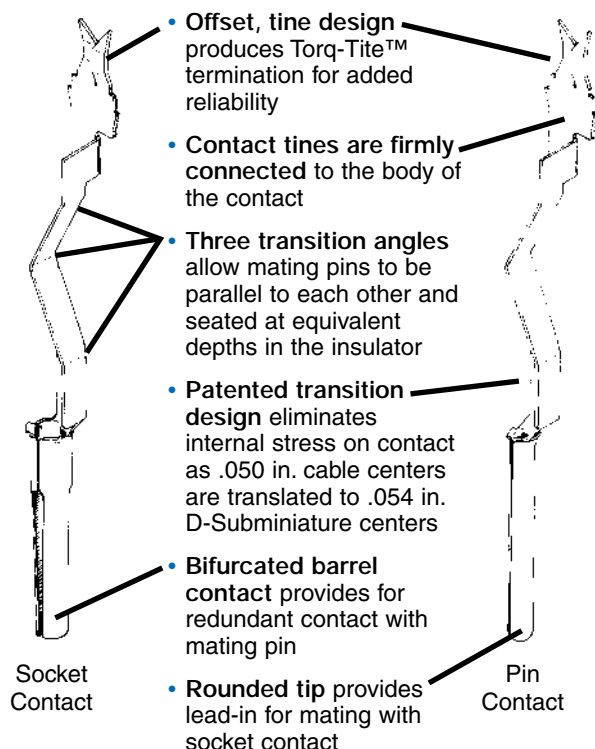
The D-Subminiature Insulation Displacement Connector is a popular standard for interconnecting many types of electronic equipment—computers and peripherals, instruments, telecommunications and test equipment—throughout the military, industrial, and commercial product sectors.

CW's D-Subminiature connectors consist of four sizes of each of two types of D-Subminiature connectors...pin and socket versions...mating to standard 9, 15, 25, and 37

conductor cable. All CW D-Subminiature connectors incorporate two basic series of patents assuring contact integrity with the cable as well as the mating connector. These connectors are UL and CSA listed and are designed to meet the standards of Mil-DTL-83503. They are fully interchangeable and mate with other standard D-Subminiature connectors.



## Contact



## D-Subminiature Features

- 9-, 15-, 25-, 37- pin or socket versions available
- Interchangeable and mateable with other D's
- UL, CSA listed
- Patented 0.050/0.054 in. (1.27/1.38mm) cable/connector transition
- Fully mating, precisely positioned contacts
- Patented off-set contact tines assure gas-tight connection
- Rugged, lightweight UL 94 V-O thermoplastic construction
- No exposed metal
- Positive polarization via D-shaped contact shroud
- All contacts numbered
- Accepts 28 AWG solid or stranded and 30 AWG solid conductors in both shielded and unshielded flat cables
- Positive, fast termination. No special assembly tooling required
- Simple, non-destructive removal of covers
- Three strain relief options available
- Easily daisy chained
- Hardware for a variety of mounting methods available
- Jackscrew design (CWN-HK-01) accepts a standard miniature banana plug for grounding
- Manufactured under U.S. patent 3,990,767.

## Patented Contact Transition

The CW contact transition is unique in that all contacts are precisely positioned to provide full contact with their mating member at every pin and socket. CW's internal transition from .050 in. to .054 in. centers eliminates the need for special cables or special cable preparation. It also eliminates the possibility of pin misalignment, and excessive insertion/withdrawal forces, providing maximum contact integrity, minimum contact resistance, and long term reliability.

## Three-way Strain Relief

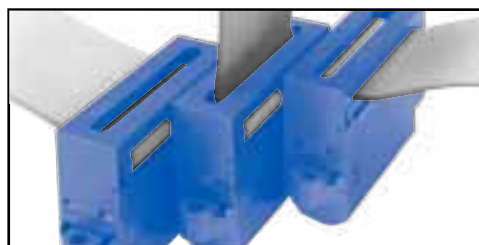
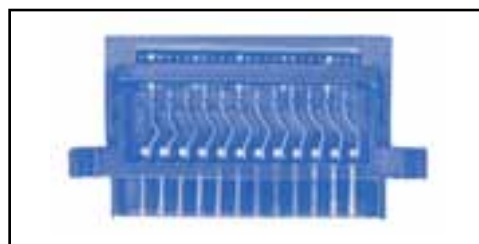
CW's exclusive design allows for three-way strain relief. This feature offers you a choice of three cable entry/exit options providing maximum flexibility and system design.

## Assembly That's a Snap

CW supplies a cover factory preassembled to the base, with the cover in a detented "up" position to allow sufficient space to insert the cable. There is no need for special cable alignment tooling. Built-in guides in both the cover and base orient the cable conductors to the connector contacts.

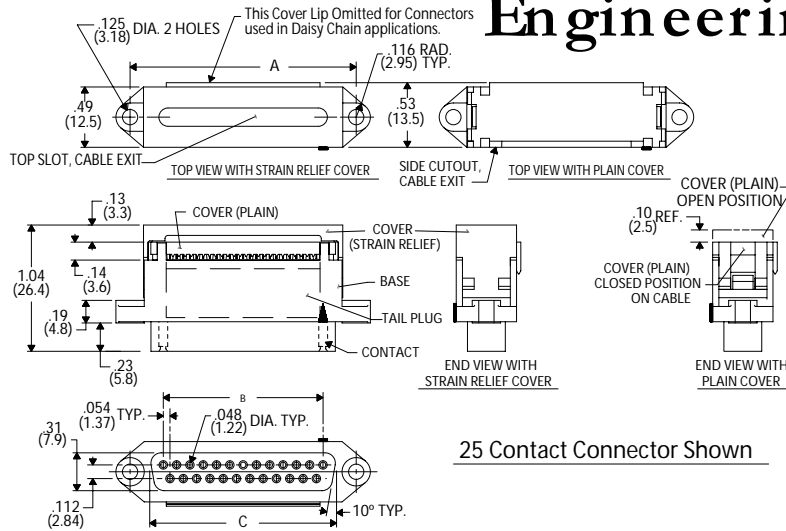
## Removable Cover

CW insulation displacement D-Subminiature connectors permit simple, non-destructive removal of the cover for maintenance and connector reuse—the open end of a paper clip and a special groove in the mounting flange (standard on all CW D's) is all that is required to remove the cover.



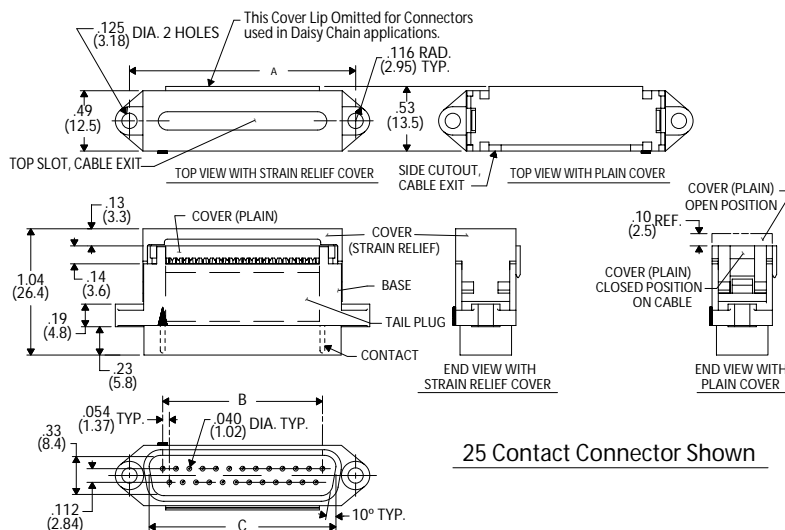
# D-Subminiature-All-Plastic

## Engineering Dimensions



### Socket D Connector

CONNECTOR DIMENSIONS			
NO. CONTS.	A	B	C
9	.984 (24.99)	.434 (11.02)	.640 (16.26)
15	1.312 (33.32)	.760 (19.30)	.966 (24.54)
25	1.852 (47.04)	1.303 (33.10)	1.510 (38.35)
37	2.500 (63.50)	1.955 (49.66)	2.162 (54.91)



### Pin D Connector

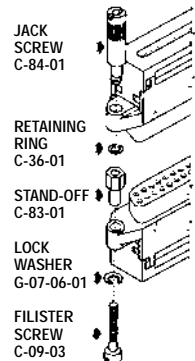
CONNECTOR DIMENSIONS			
NO. CONTS.	A	B	C
9	.984 (24.99)	.434 (11.02)	.660 (16.76)
15	1.312 (33.32)	.760 (19.30)	.986 (25.04)
25	1.852 (47.04)	1.303 (33.10)	1.530 (38.86)
37	2.500 (63.50)	1.955 (49.66)	2.182 (55.42)

## Hardware Mounting Kits for All-Plastic D-Connectors

To order, specify CWN-HK-XX.

### CWN-HK-01

For midspan splices or panel mounting with 2-56 hardware.



### FILISTER SCREW C-09-01

LOCK WASHER G-07-06-04

STAND-OFF C-83-03

FLAT WASHER G-07-05-02

LOCK WASHER G-07-06-04

HEX NUT C-28-01

LOCK WASHER G-07-06-01

HEX NUT C-28-01

LOCK WASHER G-07-06-01

HEX NUT C-28-01

LOCK WASHER G-07-06-01

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LOCK WASHER G-07-06-01

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LOCK WASHER G-07-06-01

HEX NUT C-28-01

LOCK WASHER G-07-06-01

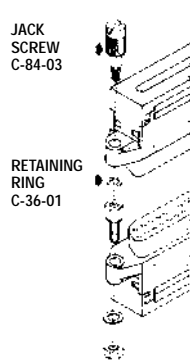
HEX NUT C-28-01

LOCK WASHER G-07-06-01

HEX NUT C-28-01

### CWN-HK-03

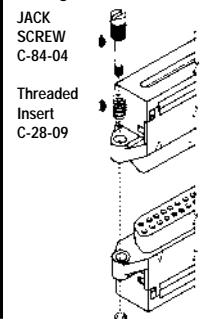
Two 4-40 threaded jack screws and retaining rings for midspan splices.



### CWN-HK-05

Two 4-40 threaded jack screws and thread press-fit inserts\* for midspan cable splices.

\*requires connector mounting holes enlarged to .150".



### HARDWARE SCREW C-06-08

THREADED INSERT C-28-02

HEX NUT C-28-03

LOCK WASHER G-07-06-01

THREADED INSERT C-28-02

HEX NUT C-28-03

LOCK WASHER G-07-06-01

THREADED INSERT C-28-02

HEX NUT C-28-03

LOCK WASHER G-07-06-01

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LOCK WASHER G-07-06-01

THREADED INSERT C-28-02

HEX NUT C-28-03

LOCK WASHER G-07-06-01

THREADED INSERT C-28-02

HEX NUT C-28-03

LOCK WASHER G-07-06-01

## Specifications and Ordering Information

### Specifications

- Contacts: phosphor bronze standard
- Contact Plating: 30μ in. gold (in mating area) over 50μ in. nickel, standard; 10μ in. gold (in mating area) over 50μ in. nickel, optional; 50μ in. gold (in mating area) over 50μ in. nickel, optional; 100μ in. 60/40 tin-lead, optional
- Insulator material: UL 94V-0 flame - retardant thermoplastic
- Cover pull-off force 8 oz/contact minimum (force applied along contacts' primary axes)
- Strain Relief Cover: standard
- Withdrawal force 2-8 oz/contact, typical
- Color: blue
- Operating temperature: -55° to +125°C
- Current 1A(maximum) per contact
- Dielectric Withstand Voltage: 500 Vdc (sea level)
- Insulation resistance: 5 x 10<sup>9</sup> ohms

### How to Order All-Plastic D-Subminiature Connectors

#### Type of Connector

182=D-Subminiature for cable end terminations, pin contact (Standard)

183=D-Subminiature for cable end terminations, socket contact (Standard)

180=D-Subminiature connector for daisy chain applications, pin contact

181=D-Subminiature connector for daisy chain applications, socket contact

**CWR-XXX-XX-00XX**

#### Plating

0021=30μ in. gold (in mating area) over 50μ in. nickel (standard)

0000=10μ in. gold (in mating area) over 50μ in. nickel

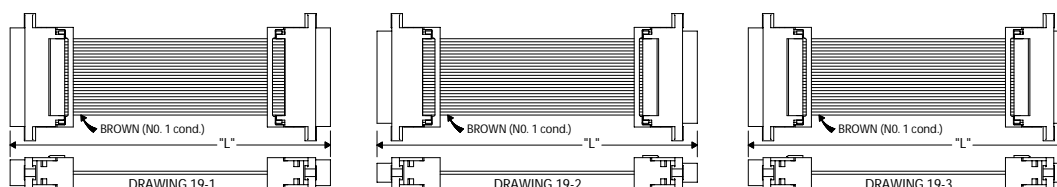
0055=50μ in. gold (in mating area) over 50μ in. nickel

0003=100μ in. tin-lead

Number of Contacts  
(9, 15, 25, 37)

### How to Order D-Subminiature Cable Assemblies

Cable assemblies with two D-Subminiature connectors on a prescribed length of color-coded cable are available with the connectors oriented per drawings 19-1, 19-2, or 19-3 (#1 contacts oriented to brown conductor.) For other lengths, orientations, numbers or combinations of connectors, contact the factory or your local value-added distributor.



**CA-XX-9X0X**

Number of Conductors  
(9, 15, 25, 37)

#### Type of Connectors

6=Two D-Subminiature connectors with pin contacts, CWR-182-XX-0021 (see drawing 19-1)

7=Two D-Subminiature connectors with socket contacts, CWR-183-XX-0021 (see drawing 19-2)

8=A D-Subminiature connector with pin contacts. CWR-182-XX-0021, on one end and a D-Subminiature connector with socket contacts. CWR-183-XX-0021, on the other end (see drawing 19-3)

#### Final assembly length "L"

1=3"±1/8"

2=6"±1/8"

3=12"±1/4"

4=24"±1/4"

5=48"±1/4"