



# ITT

Interconnect Solutions  
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*Engineered for life*

# Strip Connectors - .100"/.075" Contact Spacing

## CTA



CENTI-LOC connectors are low-cost nylon strip connectors designed for commercial applications such as instrumentation, communications, and medical equipment. They are available in continuous strip form up to a maximum length of 6 inches (152.40mm), accommodating from 1 to 60 rear insertion, front release, crimp snap-in size 22 CENTIPIN™/CENTISOCKET™ contacts. These contacts utilize a proven positive contact alignment design, giving additional contact strength and

positive contact alignment during mating.

These connectors can be ordered in kit or bulk form. The kit comprises all the parts necessary to assemble one complete 6-inch (152.40) strip connector with 60 contacts on .100 (2.54) centers or a 4-inch (101.60mm) strip with 53 contacts on .075 (1.91) centers. If more than one connector is required, the parts can be ordered in bulk and assembled as desired.

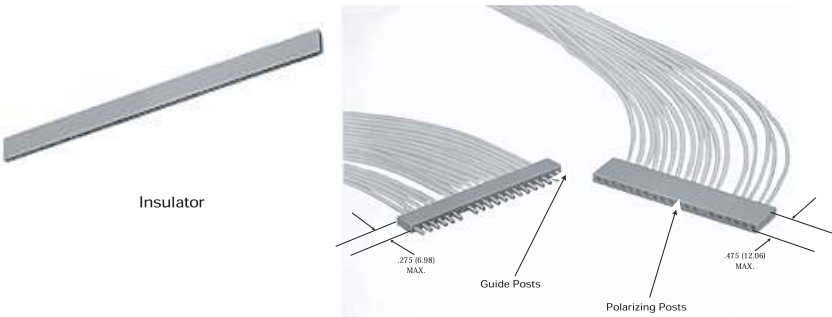
### Components and Accessories

The CENTI-LOC strip connector can be ordered in kit or bulk form. The kit includes mating insulators with a full complement of contacts and two guide posts. If more than one connector is required, the parts can be ordered in bulk and assembled as desired.

#### Kit Form

Kits include mating insulators with full complement of contacts and two guide posts.

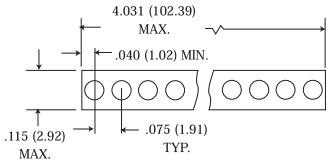
Part Number	Contact Center spacing
CTA3-KIT	.075 (1.91)
CTA4-KIT	.100 (2.54)
CTA3-CTA4-KIT	.075 (1.91) & .100 (2.54)



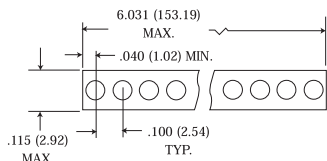
The guide posts and polarizing posts are inserted in the same manner as the contacts. The guide posts are inserted into the socket insulator and the polarizing posts are inserted into the pin insulator. The corresponding contact in the mating insulator must be removed for each. See assembly instructions.

	Part Number	Contact Center Spacing	Type	Material
Insulator	CTA3-IP-53	.075 (1.91)	Pin	Nylon
	CTA3-IS-53	.075 (1.91)	Socket	Nylon
	CTA4-IP-60	.100 (2.54)	Pin	Nylon
	CTA4-IS-60	.100 (2.54)	Socket	Nylon
Guide Post	CTA-GP	P/N 230-9507-000		Passivated Stainless Steel
Polarizing Post	CTA-PP	P/N 230-9506-000		Passivated Stainless Steel

### Dimensional Data



CTA3-.075(1.91) Centers



CTA4-.100(2.54) Centers

#### Weights

Part Number	No. of Contacts	Contacts Type	Avy. Weight oz.	± 5% gm.
CTA3	53	pin	.185	5.25
		socket	.203	5.75
CTA4	60	pin	.230	6.30
		socket	.241	6.90

Dimensions shown in inches (mm)  
Specifications and dimensions subject to change

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The Centi Line - .075" Contact Spacing  
2D/CTA


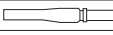

















Contacts

A resilient internal shoulder retains the contacts in the insulator housing. The front of the contact is chamfered to prevent damage to the internal shoulder as the contact is pushed into position.

P.C. Tail Contacts

Subtract .064 (1.63) ± .010 (.25) from pigtail length when used in 2D pin insulator for potting well of connector assembly.

Subtract .081 (2.08) ± .010 (.25) from pigtail length when used in 2D socket insulator for potting well of connector assembly.

Contact Part Number				
Part Number				
Pin	Socket	Type	Pin	Socket
031-9540-000	030-9542-001	Standard 30µin. plating		
031-9540-004	030-9542-002	50µ in. plating		
031-9540-005	030-9542-004	With inspection hole; 50µ in. plating		
N/A	030-9542-011	P.C. tail .026 dia. x .083 lg. Soc.		
*031-9540-013	030-9542-012	P.C. tail .020 dia. x .183 lg. Soc. .183 lg. Pin		
031-9540-016	030-9542-014	Long crimp barrel **		
031-9540-022 ***	030-9556-000 ***	Small crimp bore For AWG #32 & 30		
031-9540-007	030-9542-022	Small crimp bore For AWG #28 & 30		
*031-9540-015	030-9542-015	P.C. tail .020 dia. x .232 lg. Soc. .255 lg. Pin		
*031-9540-019	030-9542-016	P.C. tail .018 dia. x .444 lg. Soc. .445 lg. Pin  50µ in. plating		

NOTE: Plating, except as noted, is 30 micro-inch gold.

\* Consult factory for any tail size or plating requirements.

\*\* Special crimp locator required. Part number: 995-0001-714. (L3198-CL-PSL)

\*\*\* Use special insertion tip (323-9510-016 &-017).

2D and Centi-Loc Crimp and Assembly Tools



M22520/2-01



CIET-CTA Handle

Insertion Tips



CTA-AB Assembly Holding Block  
Part Number: 328-9508-000



Socket Extraction Tip

Pin Extraction Tip

Tool	Locators		
	Pin	Socket	
Description	M22520/2-01	L3198-CLP	L3198-CLS
Part Number	995-0001-584	995-0001-338	995-0001-353

Insertion Tools For Standard Contact

AWG Size*	Kit Part Number (handle and tip)	Tip Part Number**	Handle Part Number**
22	CIT-PS-CTA-22	323-9510-001	204-9500-000
24	CIT-PS-CTA-24	323-9510-002	204-9500-000
26	CIT-PS-CTA-26	323-9510-003	204-9500-000
28	CIT-PS-CTA-28	323-9510-004	204-9500-000
30/P.C. Tail	CIT-PS-CTA-30	323-9510-005	204-9500-000

\* Based on wire size per MIL-W-16878 with Type E insulation, use smaller tool for wire with thin insulation, larger tool for wire having thick insulation.

\*\* The 5 insertion tips (part numbers 323-9510-001 thru - 005), plus handle, and the pin and socket extraction tips maybe ordered as a SINGLE KIT by specifying the part number CIET-CTA-2. [Part number: 070143-0002].

Insertion Tools For Long Crimp barrel Contacts

AWG Size*	Tip Part Number *** Pin Contact	Tip Part Number *** Socket Contact	Handle Part Number***
22	323-9510-008	323-9510-012	204-9500-000
24	323-9510-009	323-9510-013	204-9500-000
26	323-9510-010	323-9510-014	204-9500-000

\*\*\* To order the SINGLE KIT for the long crimp barrel contact (tip part numbers 323-9510-008 thru -014, handle and pin and socket extraction tips) please specify CIET-CTA-3.

Extraction Tools

Contact	Description	Kit Part Number (handle and tip)	Tip Part Number	Handle Part Number
CENTIPIN	CET-P-CTA-2	070112-0002	324-9502-000	204-9500-000
CENTISOCKET	CET-S-CTA-1	070113-0001	324-9501-000	204-9500-000

Dimensions shown in inches (mm)  
Specifications and dimensions subject to change

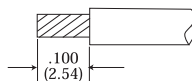
## 2D/CTA CENTI-LOCTM Connectors Assembly Instructions

The Double Density D/CTA CENTI-LOC Connectors are highly reliable and simple connectors to use. There are a few helpful suggestions that will assure complete satisfaction when followed:

1. The following instructions should be followed.
2. The proper crimp tool and locator (if required) must be used. These tools have been designed for use with this product. Substitutions of crimping equipment may result in connector failure at the assembly operation.
3. After crimping a contact to a lead it is of vital importance that the proper tool be used to assure seating the contact in the insulator in the proper position. Any substitution of insertion tools may result in over or under insertion of the contact which may damage the retention system of the insulator.
4. The female (socket) side of the connector has been designed with a controlled float to allow for ease of mating. To avoid reducing this float or causing a splaying of the contacts, any unnecessary strain caused by clamping the leads too close to the rear of the connector should be avoided. Use of recommended tooling together with proper assembly techniques will pay dividends in reliability and reduced costs.

## 2D Assembly Instructions

### WIRE STRIPPING



Cut the wires to length required and strip .100" of insulation from the end to be crimped. Check for cut or broken wires and frayed insulation.

### CONTACT CRIMPING



Using the proper crimp tool and locator, insert the contact into the locator. Insert the stripped end of the wire into the contact crimp pot, and crimp the contact to the wire. Squeeze the handles firmly to insure a proper crimp (tool will not release if crimping is incomplete).  
NOTE: Contact stop must be changed in tool locator when crimping pin and socket contacts.

### CONTACT INSERTION



1. Place the proper insertion tip in the insertion/-extraction handle and put the tip over the wire as shown. The tool tip will butt up against the crimp pot. Connector must be firmly supported during both insertion and extraction operations.



2. Using a firm, steady pressure, push the contact into the cavity until the resilient internal shoulder in the insulator snaps into the locking groove in the contact. The shoulder of the tool tip bottoms against the rear of the insulator, preventing over-insertion. Repeat for balance of contacts.

### CONTACT EXTRACTION



1. For contact extraction, remove the insertion tool tip and replace it with the proper extraction tool tip. (The socket tip will fit into the socket, and the pin tip will slide over the pin bundle). Insert the tool tip into the contact cavity: (the pin tip will butt up against the shoulder of the pin contact, and the socket tip will bottom out in the socket contact.)

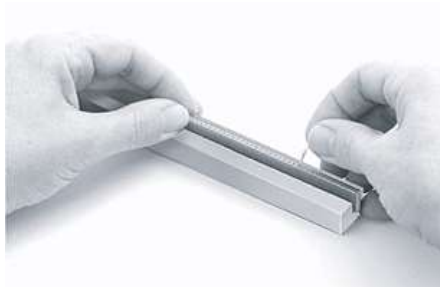


2. Apply a firm, steady pressure until the contact is released from the internal shoulder in the insulator. The shoulder of the tool tip bottom against the insulator face to prevent damage to the internal shoulder. Remove the tool tip and pull the contact from the rear of the connector. Repeat for the balance of contacts to be removed.

# The Centi Line - .075" Contact Spacing 2D/CTA

## CTA Assembly Instructions

### INSERTION



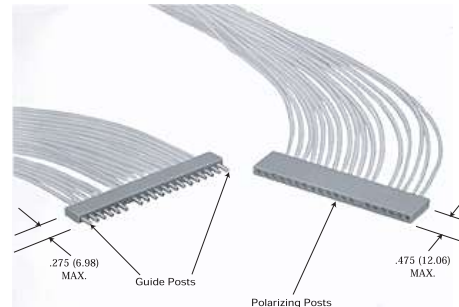
1. Place the connector into the slot in the assembly block with the arrows on the insulator pointing downward. The connector will bottom against the internal shoulder in the groove in the assembly block. Start contact insertion by placing the crimped contact in the cavity by hand.



3. With firm steady pressure, push the contact into the cavity until the resilient internal shoulder snaps into the locking groove in the contact. To prevent over insertion, the tool tip bottoms against the rear of the insulator.

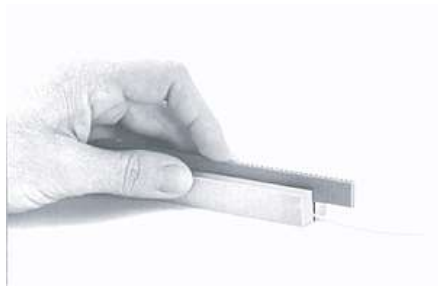


2. Position the insertion tool tip on the rear of contact as shown. The insulation must be pulled back from the crimp pot approximately 1/32" to allow the tool tip to butt against the contact crimp pot.



4. The guide post and polarizing posts are inserted in the same manner as the contacts. The guide posts are inserted into the socket insulator, and the polarizing posts are inserted into the pin insulator. The corresponding contact in the mating insulator must be removed for each.

### EXTRACTION



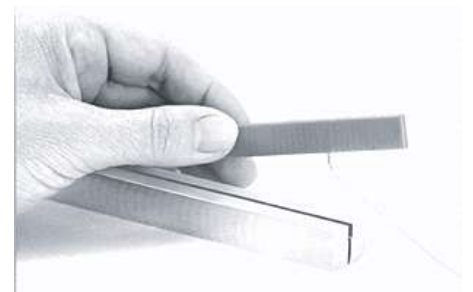
1. To extract the contacts, place the connector face up in the assembly block so that the contact to be extracted is in the end of the block that has a fully slotted opening.



3. Insert the extraction tool into the cavity and apply firm pressure until the contact is pushed thru the rear of the connector.



2. The pin extraction tool tip is tubular, slides over the pin bundle and butts against the front shoulder of the pin. The socket extraction tool is a solid rod that fits into the socket contact, the external shoulder butts against the contact socket shoulder.



4. Lift the insulator from the groove and pull the contact out. Repeat for balance of contacts to be removed.