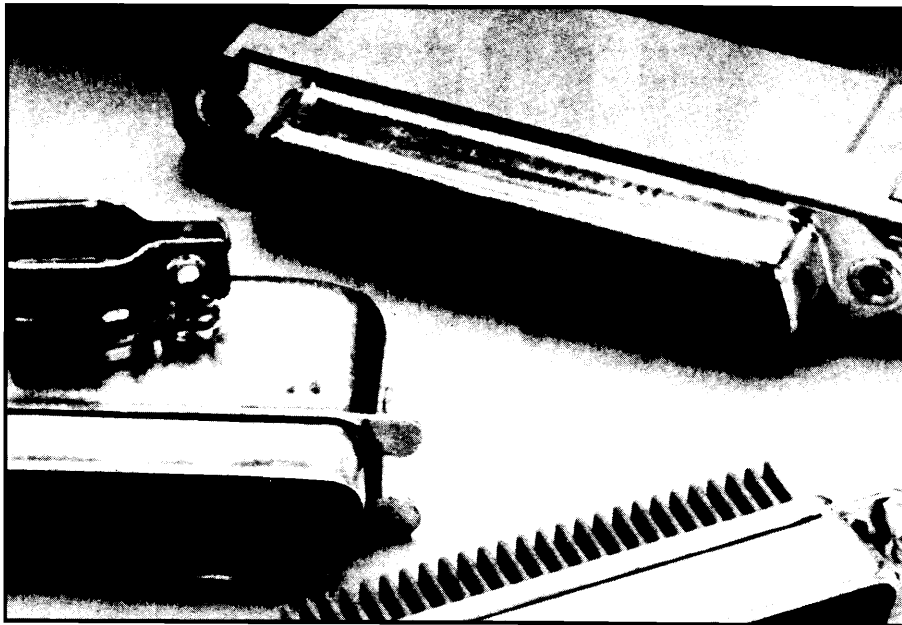


# general configuration – 157 series I.D.C. termination



## description

Amphenol 157 Micro-Pierce connectors combine the field-proven features and reliability of 57 series micro-ribbon solder-type connectors with the speed and convenience of solderless termination.

These versatile rack and panel, cable to panel, and cable to cable connectors are available in 14-, 24-, 36-, 50- and 64-contact configurations.

Solderless termination, as accomplished using either hand or automatic termination equipment is fast, requires no special skill, yet results in reliable, virtually mistake-proof termination because individual conductor preparation is not necessary.

## features

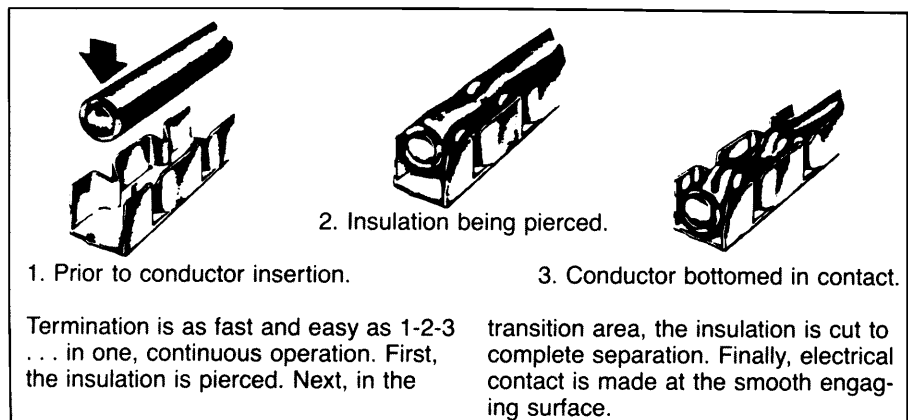
- Glass-filled polyester dielectric permits operation to 700 VDC at sea level without shorting or flashover. Dielectric resists cracking or chipping — has high mechanical strength. Also low moisture absorption.
- Iron-copper contacts with plated gold over nickel for excellent current-carrying characteristics up to 5 amps.
- Terminal area provides positive insulation-piercing, excellent electrical continuity as wiped-clean conductor cold-flows around engaging surface to form large contact area.
- Float-bushing mouting permits .020 radial float for easy mating.
- Zinc-plated steel outer shell with clear chromate finish resists corrosion.
- Wide, flat mating surfaces are pressed tightly together by the flexing action of both contacts for protection against "opens".
- Positive mating action wipes contacts clean, removes film or foreign material for low contact resistance.
- Trapezoidal shell assures correct polarity.

## general specifications

### All Micro-Pierce Connectors

Current capacity	5 amp per contact
Voltage rating	700 VDC at sea level 200 VDC at 70,000 ft.
Operating temperature	-67°F to +221°F -55°C to +105°C
Wire sizes	24 and 26 AWG, solid conductor 26 and 28 AWG, stranded conductor
Contacts	Selectively plated 20 microinches gold over 50 microinches nickel on a copper alloy base
Dielectric	DPT UL94V-0
Shells	Zinc-plated steel with clear chromate coating. Trapezoidal shape assure positive polarization.

### 3-Step Insulation Displacement



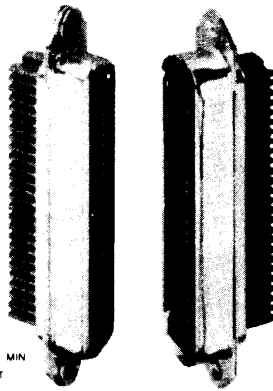
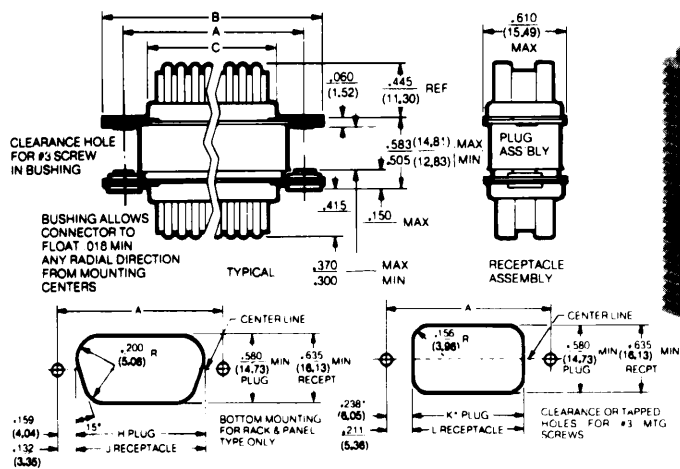
FILE E64911



Canadian Standards Association

FILE LR 45516-14

# 157 series rack-and-panel connectors



## order information

Contacts	Plug	Receptacle
14	<b>157-12140</b>	<b>157-22140</b>
24	<b>157-12240***</b>	<b>157-22240***</b>
36	<b>157-12360</b>	<b>157-22360</b>
50	<b>157-12500</b>	<b>157-22500</b>
50	<b>157-12500-3*</b>	<b>157-22500-3**</b>
64	<b>157-12640</b>	<b>157-22640</b>

\*IEEE type with .185 mounting hole.  
 \*\*IEEE type with .185 mounting hole less float bushing.  
 \*\*\*IEEE type.  
 Items in bold print are popular, readily available parts.  
**IEEE mounting hardware**  
**408-153819** Inside panel mount hardware includes two each studs, nuts, washers.  
**408-153818** Outside panel mount hardware includes two each studs, nuts, washers.

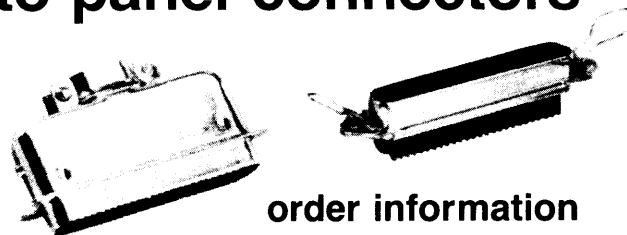
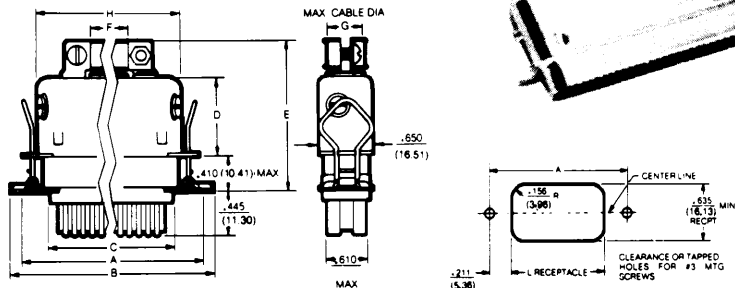
## dimensions

Contacts	Bottom Mounting						Top Mounting							
	A		B		C		H		J		K		L	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
14	1.417	35.99	1.750	44.45	.910	23.11	1.099	27.92	1.153	29.29	.941	23.90	.995	25.27
24	1.842	46.79	2.175	55.25	1.335	33.91	1.524	38.71	1.578	40.08	1.366	34.70	1.420	36.07
36	2.352	59.74	2.685	68.20	1.845	46.86	2.034	51.66	2.088	53.04	1.876	47.65	1.930	49.02
50	2.947	74.85	3.280	83.31	2.440	61.98	2.629	66.78	2.683	68.15	2.471	62.76	2.525	64.14
64	3.542	89.97	.875	98.43	3.035	77.09	3.224	81.89	3.278	83.26	3.066	77.88	3.120	79.25

NOTE: All rack and panel receptacle connectors have a float-bushing mount that permits .020" (.51mm) radial float for ease of mounting and connection. Connectors may be mounted above or below panels (see cut-out drawings above) using #3 mounting screws.

# 157 series cable-to-panel connectors

## top cable entry type



## order information

Contacts	Plug	Receptacle
14	<b>157-32140</b>	<b>157-42140</b>
24	<b>157-32240</b>	<b>157-42240</b>
36	<b>157-32360 (screw type hood)</b>	<b>157-42360</b>
36	157-32360-3 (snap on hood)	—
50	<b>157-32500</b>	<b>157-42500</b>

Items in bold print are popular, readily available parts.

## dimensions

Contacts	A		B		C		D		E		F		G		H		L	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
14	1.417	35.99	1.77	44.96	.910	23.11	.850	21.59	1.665	42.29	.348	8.84	.348	8.84	1.153	29.29	.995	25.27
24	1.842	46.79	2.195	55.75	1.335	33.91	.830	21.08	1.645	41.78	.473	12.01	.473	12.01	1.578	40.08	1.420	36.07
36	2.352	59.74	2.705	68.70	1.845	46.86	.910	23.11	1.725	43.82	.648	16.46	.500	12.7	2.089	53.06	1.930	46.02
50	2.947	74.85	3.300	83.82	2.440	61.98	1.000	25.4	1.815	46.1	.772	19.61	.500	12.7	2.683	68.15	2.525	64.14

\*Has .185 mounting hole.

# 157 series cable-to-panel connectors (cont.)

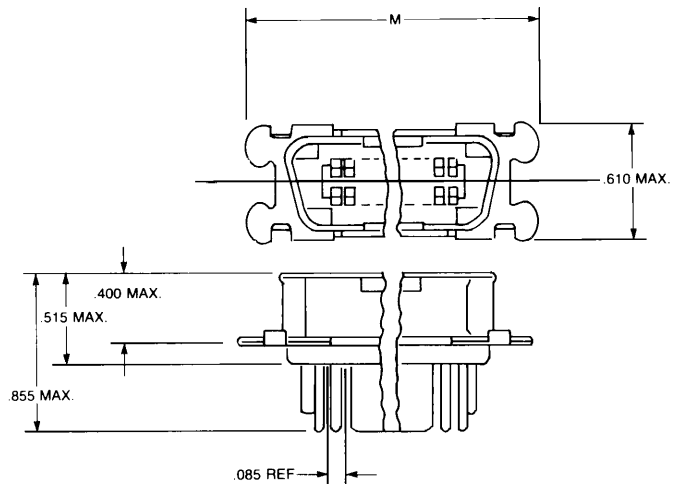
## top cable entry type (for overmold cable assemblies)

### order information

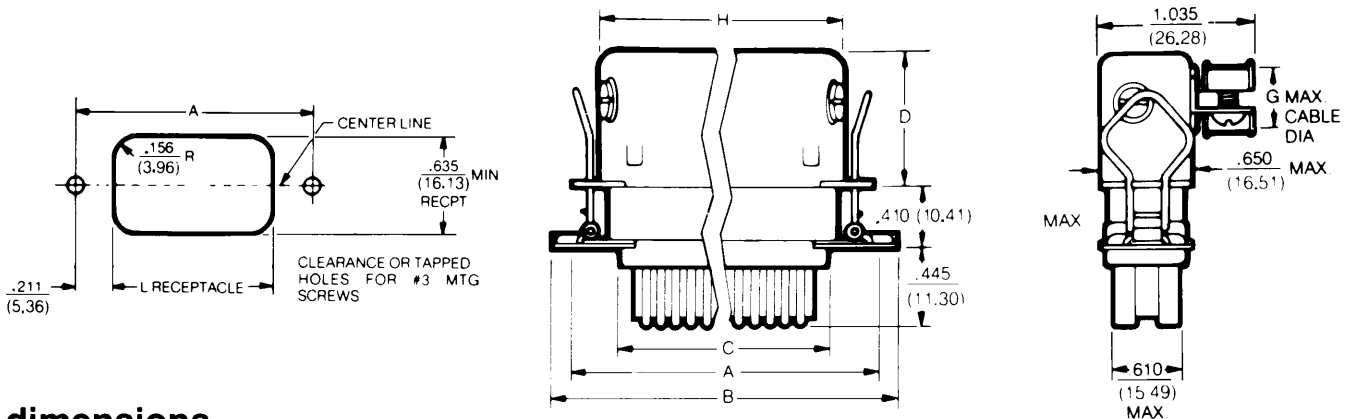
	<b>Plugs: with bail latch ears for overmold cable assemblies</b>	
<b>Contacts</b>	<b>Part Number</b>	
36	157-12360-5 (441)	
50	157-12500-10 (441)	

### dimensions

	<b>36 Contacts</b>	<b>50 Contacts</b>
	In. mm	In. mm
M	2.431 61.75	3.025 76.84



## side cable entry type



### dimensions

Contacts	A		B		C		D MAX		G		H MAX		L*	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
14	1.417	35.99	1.77	44.96	.910	23.11	.850	21.59	.348	4.48	1.153	29.29	.995	25.27
24	1.842	46.79	2.195	55.75	1.335	33.91	.830	21.03	.473	12.01	1.578	40.08	1.420	36.07
36	2.352	59.74	2.705	68.70	1.845	46.86	.910	23.11	.500	12.7	2.089	53.06	1.930	46.02
50	2.947	74.85	3.300	88.32	2.440	61.98	1.00	25.4	.500	12.7	2.683	68.15	2.525	64.14

\*Top mounting; for cable-to-panel mounting.

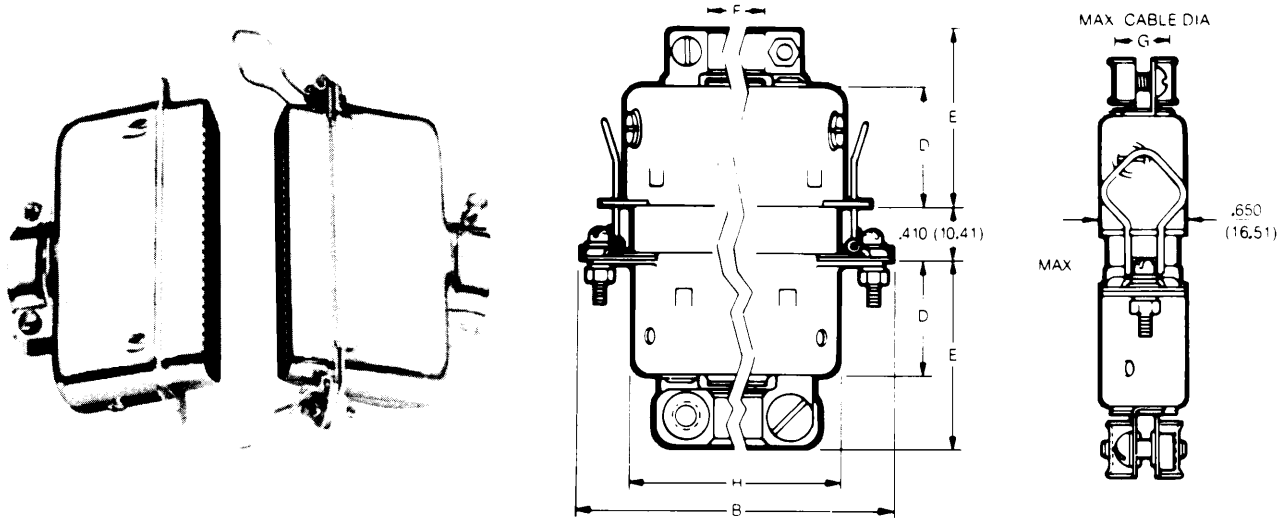
### order information

Contacts	Plug	Receptacle
14	<b>157-52140</b>	<b>157-42140</b>
24	<b>157-52240</b>	<b>157-42240</b>
36	<b>157-52360</b>	<b>157-42360</b>
50	<b>157-52500</b>	<b>157-42500</b>

Items in bold print are popular, readily available parts.

# 157 series cable-to-cable connectors

## top cable entry type



### dimensions

Contacts	B MAX		D MAX		E MAX		F MAX		G		H MAX	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
14	1.770	44.96	.850	21.59	1.255	31.88	.348	8.84	.348	8.84	1.153	29.29
24	2.195	55.75	.830	21.08	1.235	31.37	.473	12.01	.473	12.01	1.578	40.08
36	2.705	68.70	.910	23.11	1.315	33.4	.648	16.46	.500	12.7	2.089	53.06
50	3.30	83.82	1.000	25.4	1.405	35.69	.772	19.61	.500	12.7	2.683	68.15

### order information

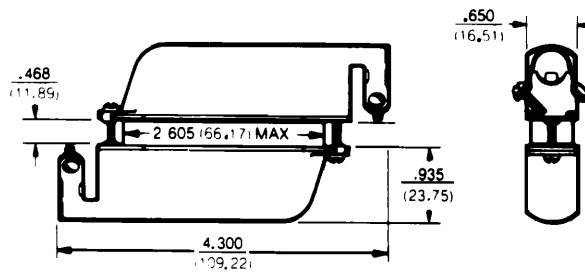
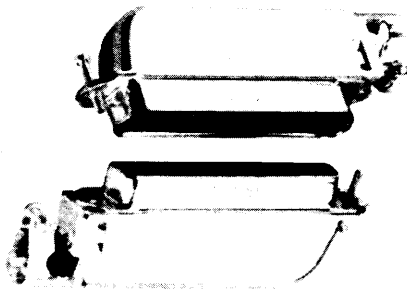
Contacts	Top Cable Entry	
	Plug	Receptacle
14	<b>157-32140</b>	<b>157-62140</b>
24	<b>157-32240</b>	<b>157-62240</b>
36	<b>157-32360</b>	<b>157-62360</b>
50	<b>157-32500</b>	<b>157-62500</b>

Items in bold print are popular, readily available parts.

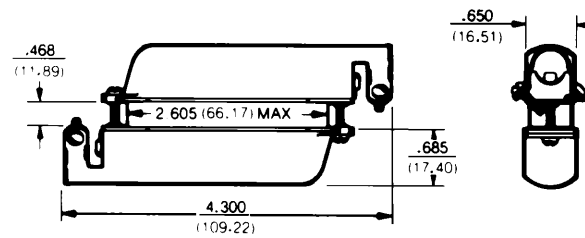
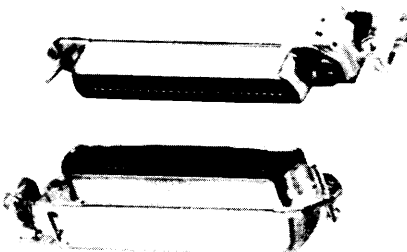
# 157 series cable-to-cable connectors (cont.)

## end cable entry type

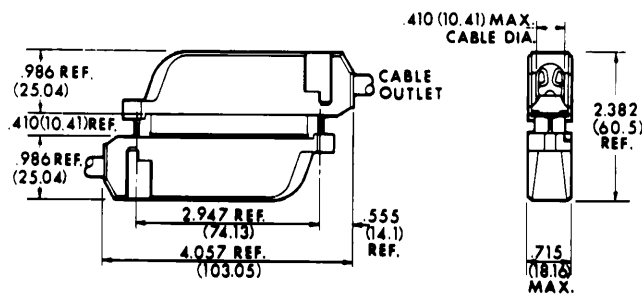
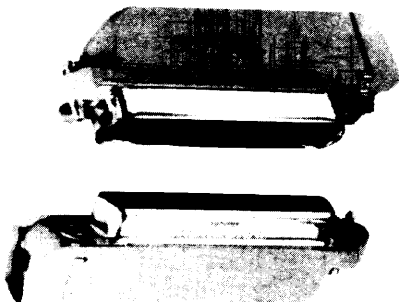
### low profile steel hood



### ultra-low profile steel hood



### low profile plastic hood

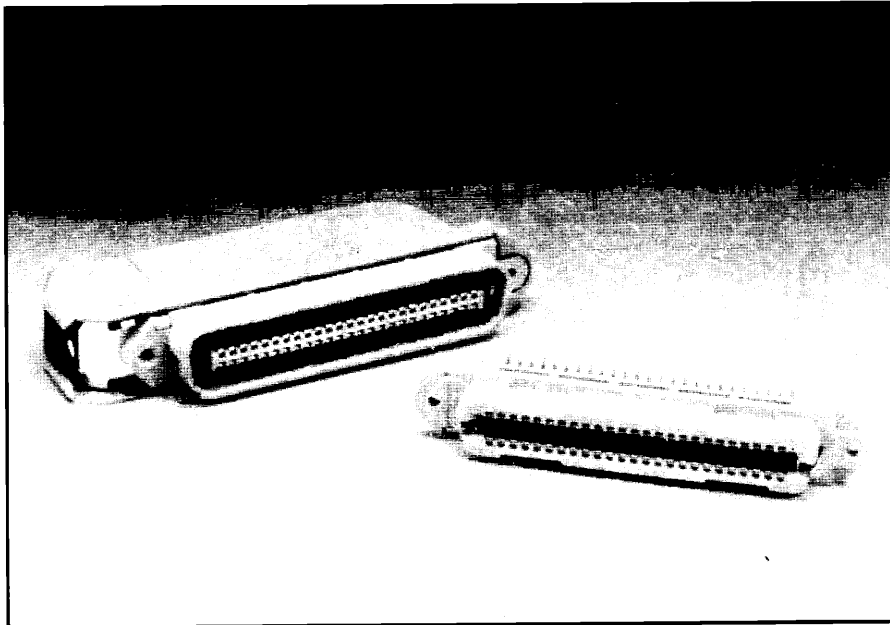


## order information

Contacts	Low-Profile Steel Hood		Ultra-Low Profile Steel Hood		All-Plastic Hood	
	Plug	Receptacle	Plug	Receptacle	Plug	Receptacle
50	<b>157-72500-3</b>	<b>157-82500-3</b>	<b>157-72500-18</b>	<b>157-82500-18</b>	<b>157-72500-3(431)</b>	<b>157-82500-3(431)</b>

Items in bold print are popular, readily available parts.

# 157 series all-plastic Micro-Pierce® connectors



## features

- Glass-filled polyester dielectric permits operation to 700 VDC at sea level without shorting or flashover. Dielectric resists cracking or chipping — has high mechanical strength. Also low moisture absorption.
- Iron-copper contacts with plated gold over nickel for excellent current-carrying characteristics up to 5 amps.
- Terminal area provides positive insulation-piercing, excellent electrical continuity as wiped-clean conductor cold-flows around engaging surface to form large contact area.
- Float-bushing mounting permits .020 radial float for easy mating.
- Zinc-plated steel outer shell with clear chromate finish resists corrosion.
- Wide, flat mating surfaces are pressed tightly together by the flexing action of both contacts for protection against "opens".
- Positive mating action wipes contacts clean, removes film or foreign material for low contact resistance.
- Trapezoidal shell assures correct polarity.
- 90° plastic hoods are separate from the cable clamp device which is attached directly to the connector body. The hood snaps on and off easily.
- The mated connectors may be locked together with either spring clips, provided on the receptacle, or a captivated screw. With the spring clip locking device there is no need for additional hardware. The spring clips engage the windows provided in the plug body.

## description

Amphenol 157 Micro-Pierce connectors combine the field-proven features and reliability of 57 series micro-ribbon solder-type connectors with the speed and convenience of solderless termination.

Solderless termination, as accomplished using either hand or automatic termination equipment, is fast, requires no special skill, yet results in reliable, virtually mistake-proof termination because individual conductor preparation is not necessary.

## specifications

<b>Current capacity:</b>	5 amp per contact
<b>Voltage rating:</b>	700 VDC at sea level 200 VDC at 70,000 ft.
<b>Operating temperature:</b>	-67°F to +221°F -55°C to +105°C
<b>Wire sizes</b>	24 and 26 AWG, solid conductor; 26 and 28 AWG, stranded conductor
<b>Contacts</b>	Selectively plated 20 microinches gold over 50 microinches nickel on a copper alloy base
<b>Dielectric</b>	Fiberglass-filled polyester

### 3-Step Insulation Displacement:



1. Prior to conductor insertion.



2. Insulation being pierced.



3. Conductor bottomed in contact.

Termination is as fast and easy as 1-2-3 . . . in one, continuous operation. First, the insulation is pierced. Next, in the

transition area, the insulation is cut to complete separation. Finally, electrical contact is made at the smooth engaging surface.



FILE E64911



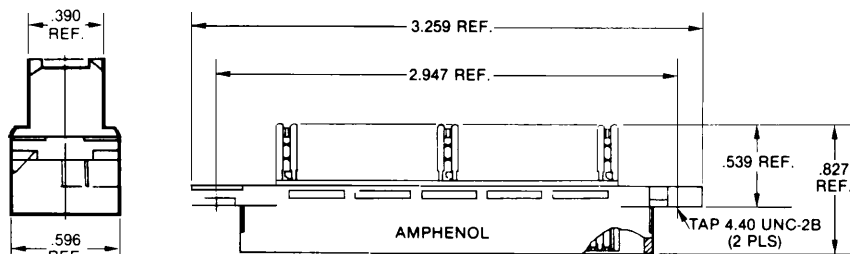
Canadian  
Standards  
Association

FILE LR 45516-14

# 157 series all-plastic Micro-Pierce® connectors (cont.)

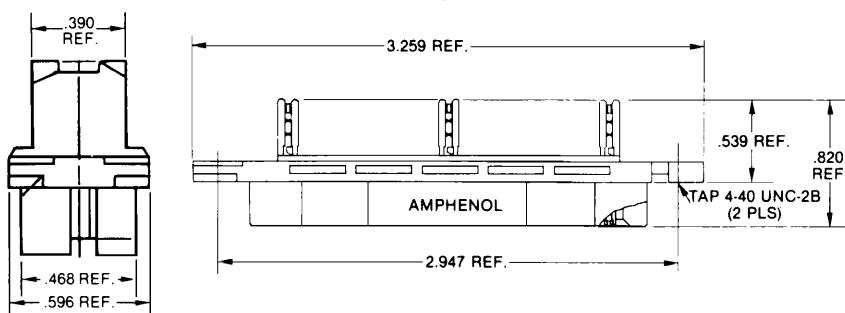
## dimensions and order information

**Plug**



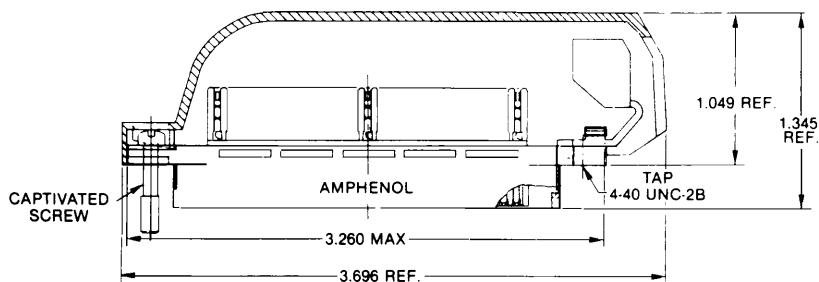
Mounting Arrangement	Amphenol Part Number
4-40 tapped 2 pls.	157-19500-01
.125" thru holes	157-19500-02

**Receptacle**



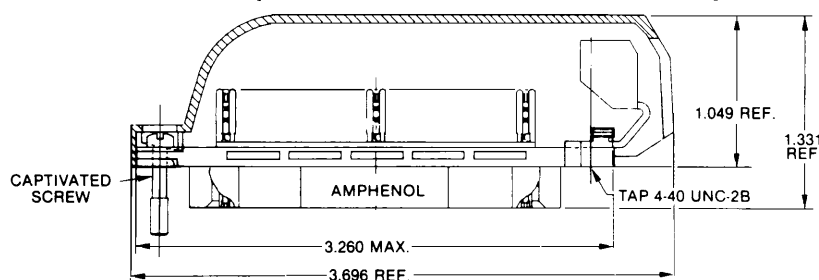
Mounting Arrangement	Amphenol Part Number
4-40 tapped 2 pls.	157-29500-01
.125" thru holes	157-29500-02
4-40 tapped 2 pls. with spring clips	157-29500-03
.125" thru holes with spring clips	157-29500-04

**Plug with hood and cable clamp**



Mounting Arrangement	Amphenol Part Number
4-40 captivated screw, tapped hole and cable clamp	<b>157-79500-01</b>
4-40 tapped 2 pls. and cable clamp	157-79500-02

**Receptacle with hood and cable clamp**



Mounting Arrangement	Amphenol Part Number
4-40 captivated screw, tapped hole and cable clamp	<b>157-89500-01</b>
4-40 tapped 2 pls. with spring clips and cable clamp	157-89500-02