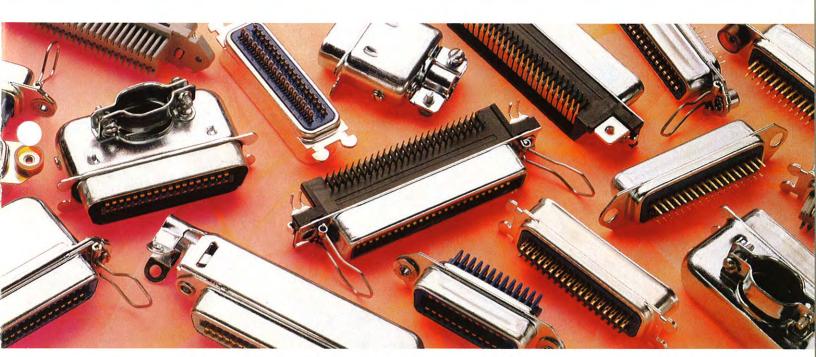
57, 157, 57LE

Amphenol®



Amphenol miniature-ribbon connectors

introduction

Amphenol 57, 157, 57LE miniatureribbon connectors — a family of connectors proven to meet the demands of today's multi-wire cable termination applications.

57, 157, 57LE miniature-ribbon connectors are ideally suited for use in modems, multi-plexers, computers and peripherals, medical equipment, PBX devices and scientific instrumentation. These connectors are used extensively in the connection of conventional telephone equipment. And they contribute to the reliable, cost-effective termination of cash registers, vending machines and similar equipment.

interchangeable/intermateable
Mating surfaces of both solder-type 57
series and solderless 157 series
connnectors are compatible. This provides an intermate/intermount capability
allowing you to interconnect new equipment without disturbing or rewiring existing connectors.

engineered performance
57, 157, 57LE series connectors feature gold plating selectively applied to significant areas. Contacts are designed to mate easily and firmly — virtually eliminating the possibility of bent pins or misalignment. The two wide, flat surfaces making electrical contact are compressed tightly by the flexing action of both members. Contacts are self-cleaning, self-wiping — contact surfaces are kept clear of corrosion and foreign matter, the result being highly reliable electrical continuity and low contact resistance.

low cost and efficient

With their long life and reliability, Amphenol 57, 157, 57LE miniature-ribbon connectors actually cost less than most other types. Low cost, efficient 57, 157, 57LE series connectors are easily terminated — either in the field, or in-plant. And special accessories available from Amphenol can help bring installed cost even lower. A large variety of connector sizes, configurations and optional features are available to suit the most exacting requirements.

The following pages detail our standard 57, 157, 57LE miniature-ribbon connectors, compatible accessories and termination tooling.

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general configuration — 57 series solder termination

description

Micro-Ribbon connectors offer a fast, economical and distinctively different method of achieving electrical interconnection.

The heart of the connector is the ribbon contact, selectively plated gold over nickel on a copper alloy base.

With contacts designed to mate easily and positively, the 57 series Micro-Ribbon connector delivers electrically and mechanically sound interconnections time after time.

Exceptionally versatile, 57 series Micro-Ribbon connectors are available in rack and panel, cable to panel, cable to cable and printed circuit types.

general specifications

Current Capacity	.5 amps per contact
Voltage Rating	.700 volts D.C. at sea level 200 volts D.C. at 70,000 ft.
Operating Temperature	55°C to +105°C -67°F to +221°F
Wire Sizes	.Solid: 22-gauge maximum Stranded: 24-gauge maximum
Contacts	.Selectively plated 20 microinches gold over 50 microinches nickel on a copper alloy base
Dielectric	.Diallyl phthalate per MIL-M-14G Type MDG
Shells	.Zinc-plated steel with clear chromate coating; trapezoidal shape for polarization.

features

- Copper alloy contacts, selectively plated gold-over-nickel for excellent current-carrying characteristics.
- UL 94 VO rated diallyl phthalate dielectric per MIL-M-14G Type MDG, for operation at up to 700 volts D.C. (sea level) without shorting or flashover. Resists cracking or chipping and has low moisture absorption.
- Float bushings on receptacles allow .020" radial float, for easy mating.
- Zinc-plated steel outer shell, with clear chromate finish, for corrosion resistance.
- Wide, flat mating surfaces, pressed tightly together by flexing action of both contacts, for electrical continuity.
- Positive mating action that wipes contacts clean, removing film or foreign matter, for low contact resistance.
- Solder cup type contact tails (for easy wire attachment) and pin style tails (for printed circuit board attachment) both are available. A high barrier between contact rows also is available.
- A trapezoidal-shape shell that assures correct polarity.





Canadian Standards Association

FILE E64911

FILE LR 45516-14

connector deviations (1,000 piece m.o.q)

Deviation Number	Deviation Description for 57/157 Series Connectors	
(398)	Connector shells and steel hardware nickel plated	
(424)	microinches nickel.	
(438) :	Gold flashed contacts on mating area, 50 microinches min. nickel underplate.	
(441)	Tin plated shells	
(448) Contacts selectively plated, 30 microinches min. gold on mating area, 50 microinches min. nickel underplate		
(450)	Contacts selectively plated, 50 microinches min. gold on mating area, 50 microinches min. nickel underplate	

NOTE: Not all part numbers are available in all deviations. To verify availability contact the factory directly, or your local manufacturer's representative or distributor. Check with factory for other deviations not listed above.

connector deviation ordering information

To order a deviation of a catalog miniature-ribbon connector, add one of the listed deviation numbers in parenthesis to the catalog part number. Example: To order 57-10500 with tin plated shells, request 57-10500 (441).

NOTE: Only one deviation number can be applied to a catalog part number at a time

57 series rack-and-panel connectors



Clearance Hole For #3 Screw In Bushing Connector to Float 020 In Any Radial Direction Any Radial Direction From Mounting Centers Typical Ref (15.49) Max (12.83) Min 300 (7.62) Min 303 (14.81) Max (12.83) Min 300 (7.62) Min 303 (1.81) Max Receptacle Assembly Receptacle Assembly Typical

A	Center Line	1	A	Center Line
.200 (5.08) R	580 .635 (14.73) Min (16.13 Plug Recep		.156 (3.96) R	.580 635 (14.73) Min (16.13) Min (16.13)
	Plug Recer	.238		Plug* Recept
15° H Plug — J Receptacle	Bottom Mounting For Rack & Panel Type Only	(6.05)	K* Plug — L Receptacle —	Clearance or Tapped Holes For #3 Mtg Screws

		14 Contacts		24 Contacts		36 Co	36 Contacts		50 Contacts		64 Contacts	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
	Α	1.417	35.99	1.842	46.79	2.352	59.74	2.947	74.85	3.542	89.97	
	В	1.750	44.45	2.175	55.25	2.685	68.20	3.280	83.31	3.875	98.43	
	С	.910	23.11	1.335	33.91	1.845	46.86	2.440	61.98	3.035	77.09	
Bottom												
Mounting	Н	1.099	27.92	1.524	38.71	2.034	51.66	2.629	66.78	3.224	81.89	
	J	1.153	29.29	1.578	40.08	2.088	53.04	2.683	68.15	3.278	83.26	
Top Mounting	K	.941	23.90	1.366	34.70	1.876	47.65	2.471	62.76	3.066	77.88	
	L	.995	25.27	1.420	36.07	1.930	49.02	2.525	64.14	3.120	79.25	

order information			Solder CupTails With Low Barrier Insert High Barrier Inse				
Contacts	Plugs: Fix-mounted*	Plugs: Fix-mounted**	Receptacles: Float-mounted*	Receptacles: Less Float Bushings**	Plugs: Fix-mounted*	Receptacles: Float-mounted*	
14	57-10140	consult sales office	57-20140	57-20140-4	N/A	N/A	
24	57-10240	57-10240-4***	57-20240	57-20240-2***	N/A	N/A	
36	57-10360	57-10360-22	57-20360	57-20360-3	57-10360-14	57-20360-10	
50	57-10500	57-10500-48	57-20500	57-20500-15	57-10500-6	57-20500-6	
64	<u> </u>		_	_	57-10640	57-20640	

^{*.103&}quot; Mounting Hole (accepts #3 screw — not included)

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.

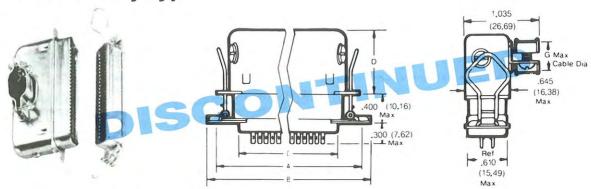
PLEASE NOTE: Amphenol rack and panel receptacle connectors have float bushings which allow .020" (6.008mm) radial float. Plugs and receptacles have solder cup tails and accept 22-gauge solid or 24-gauge (maximum) stranded wire. U.L. recognized.

^{**.185&}quot; Mounting Hole (accepts #8 screw — not included)

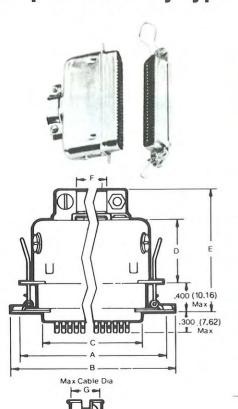
^{***}IEEE Type

57 series cable-to-panel connectors

side cable entry type



top cable entry type



(16.38)

,610 (15.49)

dimensions

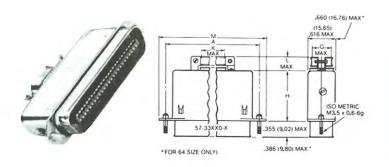
	14 Co In.	ntacts mm	24 Co In.	ntacts mm	36 Co In.	ntacts mm	50 Co In.	ntacts mm
Α	1.417	35.992	1.842	46.787	2.352	59.741	2.947	74.854
В	1.770	44.958	2.195	55.753	2.705	68.707	3.300	83.820
С	.910	23.114	1.335	33.909	1.845	46.863	2.440	61.976
D	.850	21.59	.830	21.08	.910	23.11	1.000	2.54
E	1.665	42.29	1.645	41.78	1.725	43.82	1.815	46.10
F	.348	8.84	.473	12.01	.648	16.46	.772	19.61
G	.348	8.84	.473	12.01	.500	12.7	.500	12.7

NOTE: All dimensions are reference.

Contacts	Plugs: Top Cable Entry Part Number	Plugs: Side Cable Entry Part Number	Receptacle Mating Connection With Spring Latches Part Number
14	57-30140	57-50140	57-40140
24	57-30240	57-50240	57-40240
36	57-30360 (screwtype hood)	57-50360	57-40360
36	57-30360-18 (snap on hood)	- 0	
36		-0	57-40360-9 (high barrier)
50	57-30500	57-50500	57-40500
50	57-30500-3 (high barrier)	4	57-40500-4 (high barrier)

57 series cable-to-panel connectors

top cable entry type for screw lock



order information

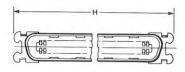
Contacts	Plug: Top Cable Entry With Zinc Plated Shells For Screw Locking Part Number	Plug: Top Cable Entry With Nickel Plated Shells For Screw Locking Part Number
14	57-33140-1	57-33140-2
24	57-33240-1	57-33240-2
36	57-33360-1	57-33360-2
50	57-33500-1	57-33500-2

NOTE: Top cable entry plugs for screw locking can be mated with rack and panel type connectors utilizing IEEE mounting hardware.

dimensions

Size	1	4	2	4	3	6	5	0
Dim.	Inch	mm	Inch	mm	Inch	mm	Inch	mm
Α	1.417	35.99	1.842	46.79	2.352	59.74	2.947	74.85
G	.442	10.72	.468	11.89	.468	11.89	.468	11.89
Н	.843	21.41	.825	20.96	.905	22.99	.995	25.27
K	.348	8.84	.473	12.01	.639	16.23	.766	19.46
L	.405	10.29	.400	10.16	.405	10.29	.405	10.29
M	1.729	43.92	2.154	54.71	2.664	67.67	3.259	82.78

top cable entry type for overmold cable assemblies





dimensions

	36 Co	ntacts	50 Co	ntacts
	ln.	mm	In.	mm
Н	2.431	61.75	3.030	76.96

NOTE: All dimensions are reference.



Contacts	Plugs: With Bail Latch Ears For Overmold Cable Assemblies (low barrier) Part Number	Plugs: With Bail Latch Ears For Overmold Cable Assemblies (high barrier) Part Number
36	57-10360-29 (441)	57-10360-28 (441)
50		57-10500-79 (441)

57 series cable-to-cable connectors

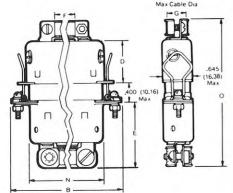
top cable entry type



dimensions

	14 Contacts		24 Contacts		36 Contacts		50 Contacts	
	in.	mm	in.	mm	in.	mm	in.	mm
В	1.770	44.958	2.195	55.753	2.705	68.707	3.300	83.820
D	.850	21.59	.830	21.08	.910	23.11	1.000	2.54
E	1.255	31.88	1.235	31.37	1.315	33.4	1.405	35.69
F	.348	8.84	.473	12.01	.648	16.46	.772	19.61
G	.348	8.84	.473	12.01	.500	12.7	.500	12.7
N	1.153	29.286	1.578	40.081	2.089	53.061	2.683	68.148
0	2.906	73.812	2.875	73.025	3.032	77.013	3.218	81.737

NOTE: All dimensions are reference.



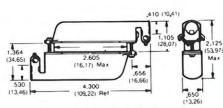
order information

Contacts	Plugs: Top Cable Entry Part Number	Plugs: Side Cable Entry Part Number	Receptacle Mating Connection With Spring Latches Part Number
14	57-30140	William .	57-60140
24	57-30240	57-50240	57-60240
36	57-30360	57-50360	57-60360
50	57-30500	57-50500	57-60500
50	57-30500-3 (high barrier)	_	

running cable type

NOTE: Only available in 50 contact size.





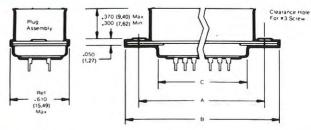
Low Profile Hood

Part Number 57-10500-7	(low hood)—5/8"
57-10500-7 (402)	
57-10500-14	(high hood)—7/8"
50-Size Receptaci Part Number	le Connectors w/ Metal Hoods
57-20500-7	(high hood)—7/8"
The second secon	(high hood, egg
57-20500-7 (402)	crated)—7/8"

57 series printed circuit connectors

straight tail without spring latch





dimensions (See P.C. Board layout on page 8.)

	14 Co in.	ntacts mm.	24 Co in.	ntacts mm.	36 Co in.	ntacts mm.	50 Co in.	ntacts mm.
Α	1.417	35.991	1.842	46.787	2.352	59.741	2.947	74.854
В	1.750	44.450	2.175	55.245	2.685	68.199	3.280	83.312
С	.910	23.114	1.335	33.909	1.845	46.863	2.440	61.976
D	.510	12.954	.935	22.749	1.445	36.703	2.040	51.816

order information

Plugs/PC Contacts (.100" tail)*.

Contacts	Part Number		
14	57-10140-4		
24	57-10240-3		
36	57-10360-13		
50	57-10500-27		

Plugs/PC Contacts (.135" tail)*.

Contacts	Part Number	
14	57-10140-5	
24	57-10240-5	
36	57-10360-17	
50	57-10500-46	

Plugs/PC Contacts (.156" tail)*.

Part Number
N/A
57-10240-12
57-10360-25
57-10500-73

Receptacles/PC Contacts (.100" tail): Float-Mounted*

Contacts	Part Number		
14	57-20140-8		
24	57-20240-8		
36	57-20360-9		
50	57-20500-31		

Receptacles/PC Contacts (.135" tail): Without Float Bushings**

	-
Contacts	Part Number
14	57-20140-10
24	57-20240-11
36	57-20360-13
50	57-20500-58

Receptacles/PC Contacts (.100" tail): Without Float Bushings**

Contacts	Part Number
14	57-20140-12
24	57-20240-14
36	57-20360-15
50	57-20500-65

Receptacles/PC Contacts (.156" tail): Without Float Bushings**

Contacts	Part Number		
14	N/A		
24	57-20240-23		
36	57-20360-19		
50	57-20500-85		

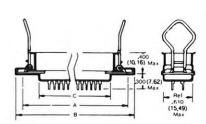
- * 103" Mounting Hole (accepts #3 screw not included)
- ** 185" Mounting Hole (accepts #8 screw not included)

straight tail with spring latch



order information

Contacts	Receptacles/ PC Contacts With Spring Latch (.100" tail)	Receptacles/ PC Contacts With Spring Latch (.135" tail)	Receptacle PC Contacts With Spring Latch (.156" tail)
14	57-40140-8	57-40140-11	N/A
24	57-40240-9	57-40240-11	57-40240-14
36	57-40360-12	57-40360-16	57-40360-24
50	57-40500-9	57-40500-16	57-40500-24

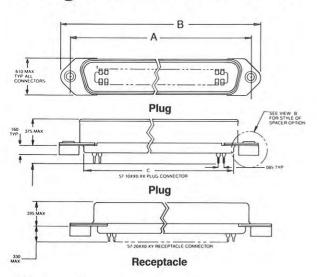


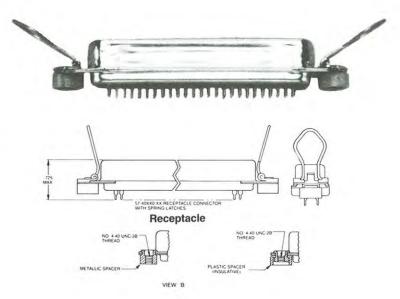
dimensions

See dimensions table at top of page. (See P.C. Board layout on page 8.)

57 series printed circuit connectors (cont.)

straight tail with standoff





dimensions

See dimensions table at top of page 7.

order information

Plugs/PC Contacts (.156) Metallic Standoff

24	57-10240-14					
36	57-10360-27					
50	57-10500-77					

Plugs/PC Contacts (.156) Insulative Standoff

24	57-10240-13				
36	57-10360-26				
50	57-10500-69				

Receptacles/PC Contacts (.156) Metallic Standoff

24	57-20240-25 57-20360-21				
36					
50	57-20500-87				

Receptacles/PC Contacts (.156) Insulative Standoff

24	57-20240-24
36	57-20360-20
50	57-20500-79

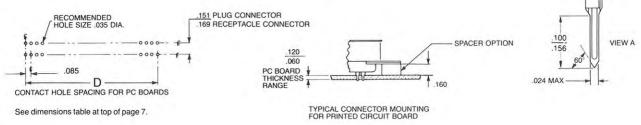
Receptacles/PC Contacts (.156) And Spring Latches Metallic Standoff

24	57-40240-16
36	57-40360-23
50	57-40500-26

Receptacles/PC Contacts (.156) And Spring Latches Insulative Standoff

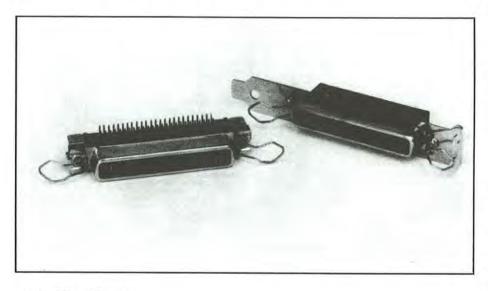
24	57-40240-15
36	57-40360-21
50	57-40500-23

typical mounting, contact hole spacing and termination lengths for PC boards



57 series right angle **PCB** mount receptacle

(see also page 25, 57LE right angle)



specifications

Current rating:

5 amps/contact

Voltage rating:

700 VDC at sea level

1,000 Megaohms min.

200 VDC at 70,000 ft.

Withstanding

voltage:

1,000 VAC

Insulation

resistance:

Contact resistance:

Operating

temperature:

15 Milliohms max. -67°F to +221°F

 $(-55^{\circ}C \text{ to} + 105^{\circ}C)$

Insulator material:

Reinforced thermoplastic UL 94 V-O

Beryllium Copper

rated, black

Contact material:

Shell

bracket:

material: Steel, Aluminum killed.

Zinc plated with clear chromate finish

Ground

Cold rolled Steel; bright Tin plated

Amphenol introduces a new low profile right angle printed circuit board receptacle for Host Adapter Accessory Cards. Developed in response to newly emerging SCSI applications, it is also an ideal choice for any application requiring a low-cost, right angle PC tail connector.

Available in either standard, or reverse polarization, these receptacles are completely intermateable with standard Amphenol micro-ribbon® connectors. To accommodate PC panel or chassis thickness, the front shell has been lengthened 0.100". A 0.070" reduction in connector-to-board height, as measured from PCB surface to connector centerline, provides a lower profile to accommodate PC Host Adapter Card/IO Port configurations.

Beryllium copper contacts feature recessed "Closed Front Entry" design for improved ESD suppression. The positive mating action of these contacts is self-wiping and self-cleaning, resulting in highly reliable electrical continuity and low contact resistance. Spring clip or jack screw mounting hardware assures connectors remain tightly engaged.

Contact plating:

30 microinches Gold in mating area, 100 microinches Tin/Lead

on tails, 50 microinches Nickel underplate

Mounting plates:

MA

Cold rolled Steel: Zinc plated with clear chromate finish

order information

Series Tail Length /Mtg. Thd. Size /Connection Style

A = 0.125" /#6-32 thd. C = 0.125"/ #4-40 thd. E = 0.125" /#6-32 thd. G = 0.125" / #4-40 thd. /spring latch /spring latch /jackscrew /jackscrew

> Receptacle Style/Contact Material **B** = standard "D" polarization/Beryllium Copper D = reverse "D" polarization/Beryllium Copper

57-B X 50 X -XX X 00

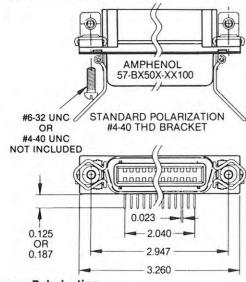
Ground Bracket Type = #4-40 thd. extrusion = P.C.B. locking tabs (.062 P.C.B.)

> 30 micro in. min Gold on mating area; 100 micro in. Tin/Lead on tails; 50 micro-in min Nickel underplate.

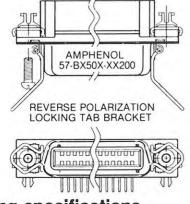
57 series right angle PCB mount receptacle (cont.)

receptacle with spring latch

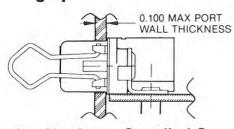
Standard Polarization

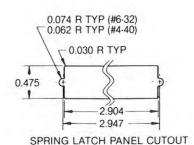


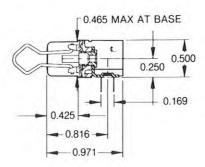
Reverse Polarization

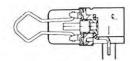


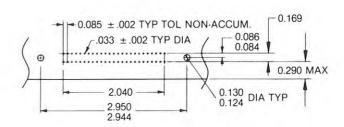
mounting specifications











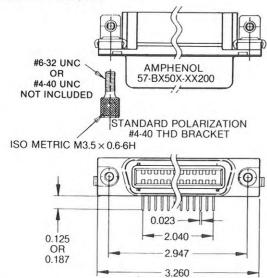
Mounting Hardware Supplied Separately (20 screws per package—order by number of packages)

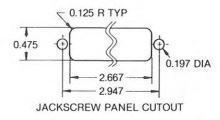
Hardware Descriptio	n	Part Number For Screw With #6-32 External Thread	Part Number For Screw With #4-40 External Thread		
Screw For Spring Latch Receptacle		57-1911-01	57-2030		
Jackscrews (Internal M3.5×0.6-6H Thread Size) #4-40 UNC-2B		57-1912-02	57-2031		
			57-2054		

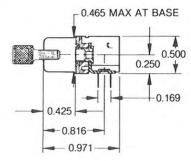
57 series right angle PCB mount receptacle (cont.)

receptacle with jack screw

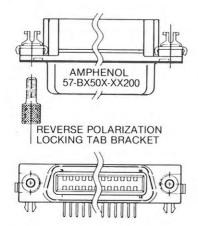
Standard Polarization

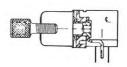






Reverse Polarization



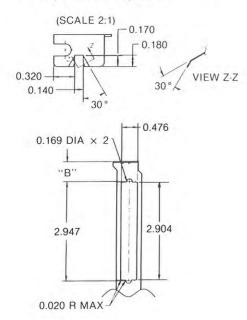


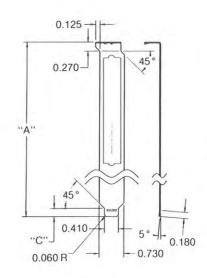
Item	Material	Standard Plating
Housing	Reinforced thermoplastic UL rated 94V-0, black	
Contacts	0.008" Beryllium Copper	30 microinches Gold mating area; 100 microinches Tin/Lead on tails; 50 microinches Nickel underplating
Shell	Cold rolled Steel Aluminum killed, deep draw quality	.0002–.0004" electrodeposited clear chromate over .0002–.0004" electrodeposited Zinc per spec. QQ-Z-325, Class 3, Type II
Ground bracket	Cold rolled Steel	.00020004" bright Tin plating
Rivets	SAE C-1006 Steel	.0002–.0004" electrodeposited clear chromate over .0002–.0004" electrodeposited Zinc per spec QQ-Z-325, Class 3, Type II
Spring latch	0.038" dia. Stainless Steel wire	

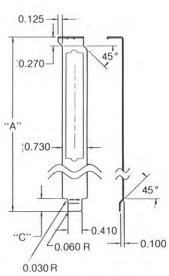
57 series right angle PCB mount receptacle (cont.)

host adapter card mounting plates

for 50 position receptacle







Straight Tab

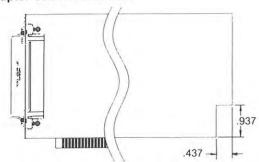
Dual 45° Tab

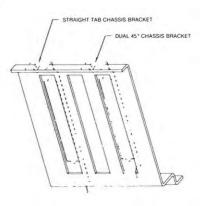
dimensions/order information (10 000 pc. MOQ)

Tab	Amphenol	Dimensions						
Style	Style Part Number Straight 57-2039-802	Α	В	С				
Straight	57-2039-802	4.750	0.562	0.240				
Dual 45°	57-2039-902	4.150	0.630	0.346				

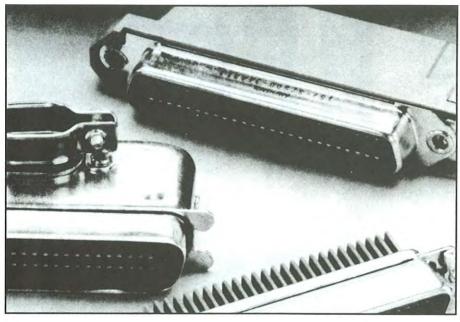
applications

Host Adapter Card Accessories





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 (see factory for 64-pin option).

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.





Canadian Standards Association

FILE E64911

FILE LR 45516-14

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	22 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.

*see factory for further information

3-Step Insulation Displacement



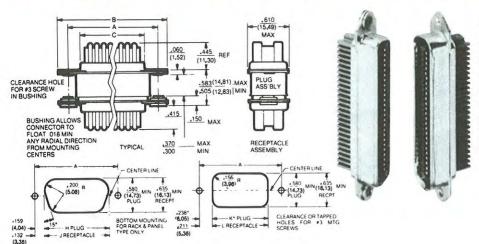
1. Prior to conductor insertion.

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.

157 series rack-and-panel connectors



order information

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

IEEE mounting hardware

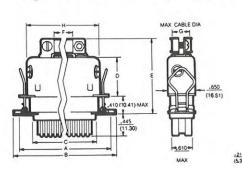
408-153819 Inside panel mount hardware includes two each studs, nuts, washers. 408-153818 Outside panel mount hardware includes two each studs, nuts, washers.

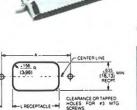
dimensions

							Bottom Mounting				Top Mounting			
		A		3	(0	1	1		J	1	(L,
Contacts	In.	mm	In.	mm	In.	mm	ln.	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 (screw type hood)	Receptacle
14	157-32140	157-42140
24	157-32240	157-42240
36	157-32360	157-42360
50	157-32500	157-42500

dimensions

	1	4	-	3	()		E		F		G	1	1		L
Contacts	In.	mm	In.	mm	ln.	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.

^{*}IEEE type with .185 mounting hole.
**IEEE type with .185 mounting hole
less float bushing.

^{***}IEEE type.

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

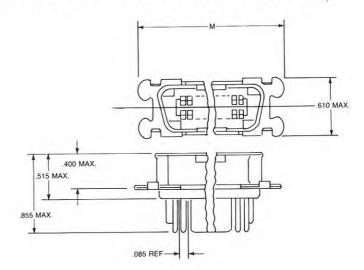
top cable entry type (for overmold cable assemblies)

order information

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

dimensions

	36 Co	ntacts	50 Contact			
	In.	mm	ln.	mm		
М	2.431	61.75	3.025	76.84		



SCSI overmold hood kit for 50 position connectors

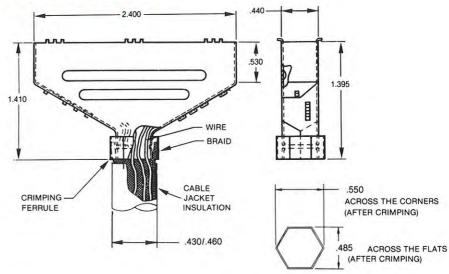
This kit, including two hermaphroditic hood shells and a ferrule, reduces user pre-mold operations thus lowering labor costs. Also, the single crimp ferrule eliminates the need for an inner/outer crimp typical of other product offerings.

applications

For use with the following Amphenol connectors: 157-12500-10 (441) 157-12500-14 (441) 157-22500-14 (441) 157-42500 (441) Use suffix "508" for connector & overmold hood combination kit, i.e., 157-12500-10-(508)

order information

Part Number: 157-1869-501



Assembly Instructions:

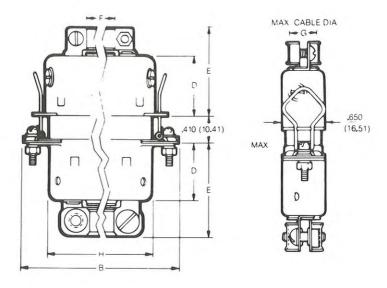
- 1.) Slide ferrule over the cable.
- Remove jacket insulation to appropriate length.
- 3.) Remove braid to appropriate length.
- Roll back braid over the jacket insulation.
- 5.) Terminate the connector.

- 6.) Assemble the overmold hoods.
- 7.) Roll back braid over the hoods.
- Slide ferrule over the braid such that the braid is sandwiched between the hood and ferrule.
- 9.) Crimp the ferrule.

157 series cable-to-cable connectors

top cable entry type





dimensions

	BN	IAX	DN	IAX	EN	IAX	FN	MAX		G	HIV	IAX
Contacts	In.	mm	ln.	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

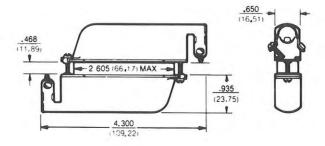
	Top Cat	ole Entry
Contacts	Plug	Receptacle
14	157-32140	157-62140
24	157-32240	157-62240
36	157-32360	157-62360
50	157-32500	157-62500

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

end cable entry type

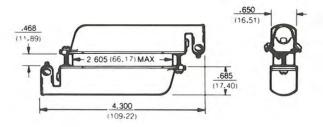
low profile steel hood





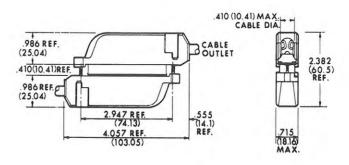
ultra-low profile steel hood





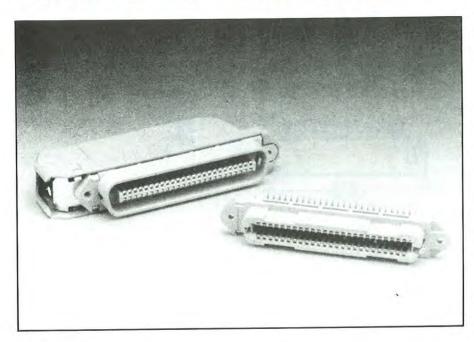
low profile plastic hood





	Low-Profile	Steel Hood	Ultra-Low Prof	ile Steel Hood	All-Plastic Hood		
Contacts	Plug	Receptacle	Plug	Receptacle	Plug	Receptacle	
50	157-72500-3	157-82500-3	157-72500-18	157-82500-18	157-72500-3(431)	157-82500-3(431)	

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 al for low contact resistance.
- Trapezoidal shell assures correct polarity.





onent Standards
Association

FILE E64911 FILE LR 45516-14

- 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

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

Fiberglass-filled polyester

3-Step Insulation Displacement:





2. Insulation being pierced.

20.4-20.0

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.

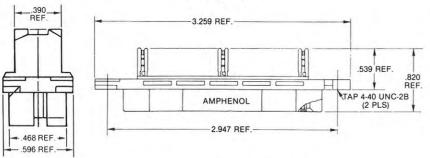
157 series all-plastic Micro-Pierce® connectors (cont.)

dimensions and order information

Plug 3.259 REF. 2.947 REF. 539 REF. 827 REF. AMPHENOL TAP 4.40 UNC-2B (2 PLS)

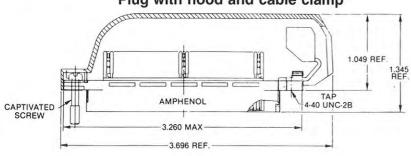
Mounting Arrangement	Ampheno! Part Number
4-40 tapped 2 pls.	157-19500-01
.125" thru holes	157-19500-02

Receptacle



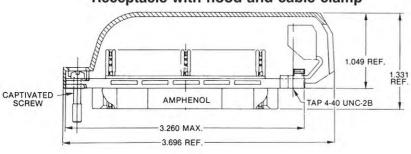
Mounting Arrangement	Amphenol Part Number
4-40 tapped 2 pls.	157-29500-01
.125" thru holes	157-29500-02
4-40 tapped 2 pls. with spring clips	157-29500-03
.125" thru holes with spring clips	157-29500-04

Plug with hood and cable clamp



Mounting Arrangement	Amphenol Part Number
4-40 captivated screw, tapped hole and cable clamp	157-79500-01
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	157-89500-01
4-40 tapped 2 pls. with spring clips and cable clamp	157-89500-02

connectors for small computer system interface (SCSI) applications

description

Amphenol 57 and 157 series connectors are ideally suited for small computer system interface (SCSI), given their compact design and versatility.

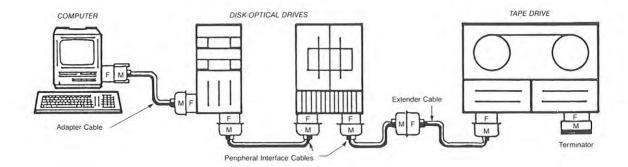
These connectors provide the internal and external interconnections between host computers and various types of peripheral devices including: disk drives; tape drives; printers; and optical disk storage units.

Amphenol 57 and 157 series connectors for SCSI applications provide plugs incorporating grounding indents for maximum EMI/RFI protection, in addition to tin plated shells for solderability.

An overmold can is available for the 157 series 50 contact connector. Also available is a low profile right angle printed circuit board connector for host adapter accessory cards.

applications

The schematic diagram shown on this page illustrates a typical interconnect configuration as defined by ANSI X3T9.2. While this may vary by manufacturer and equipment design, it serves to demonstrate the SCSI interconnect system and connectors offered by Amphenol.

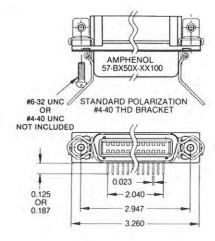


SCSI board mount type 50 position receptacle

order information

Part Number: 57-BX50X-XXX00 & 57LE-40XX0-X70XX (drawing not shown)

NOTE: See pages 9 & 26 for specifications and order information for this connector.



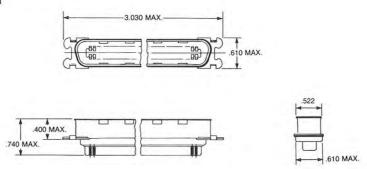
SCSI solder type 50 position plug for spring latch

Applications: Terminators and Feedthrough Adapters

order information

Part Number: 57-10500-79 (441)

NOTE: See page 5 for specifications and order information for this connector.

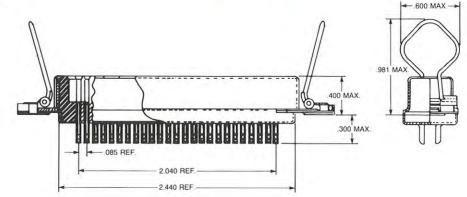


SCSI solder type 50 position receptacle with spring latch

Applications: Feed-through Adapters

Order information Part Number: 57-40500 (441)

NOTE: See page 4 for specifications and order information for this connector.



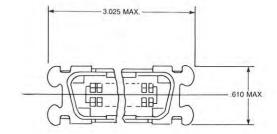
SCSI overmold cable connectors (IDC)

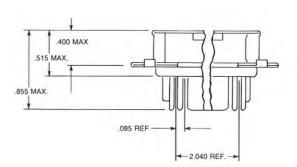
50 position plug for spring latching

Applications: Adapters, Peripheral Interface and Extended Cables

order information Part Number: 157-12500-10 (441)

NOTE: See page 15 for specifications and order information for this connector.





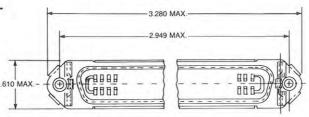
SCSI overmold cable connectors (IDC)

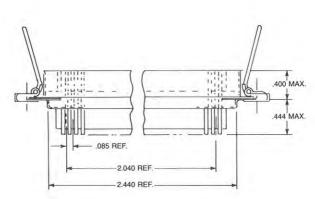
50 position receptacle with spring latch

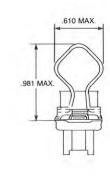
Applications: Adapters; Peripheral Interface; and Extended Cables

order information Part Number: 157-42500 (441)

NOTE: See page 15 for specifications and order information for this connector.







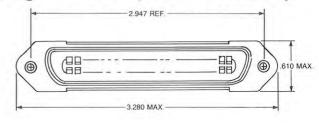
SCSI overmold cable connectors (IDC)

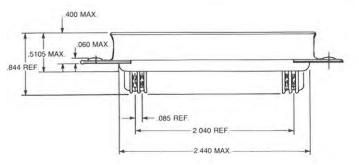
50 position plug for 4-40 mounting screws (not included)

Applications: Adapters, Peripheral Interface or Extended Cables

order information Part Number: 157-12500-14 (441)

NOTE: See page 14 for specifications and order information for this connector.



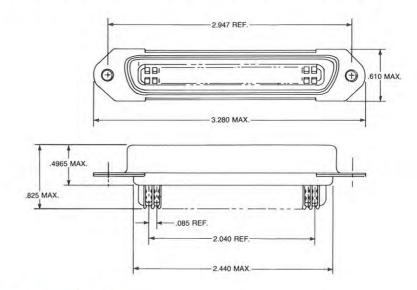


SCSI overmold cable connectors (IDC)

50 position receptacle for 4-40 screws (not included)

Applications: Adapters; Peripheral Interface; and Extended Cables

order information
Part Number: 157-22500-14 (441)



SCSI overmold hood kit for 50 position connectors

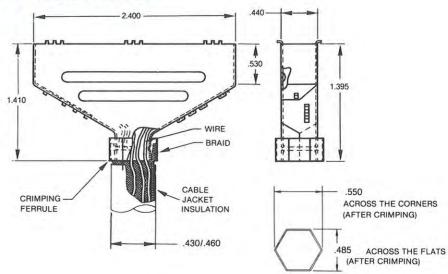
This kit, including two hermaphroditic hood shells and a ferrule, reduces user pre-mold operations thus lowering labor costs. Also, the single crimp ferrule eliminates the need for an inner/outer crimp typical of other product offerings.

applications

For use with the following Amphenol connectors: 157-12500-10 (441) 157-12500-14 (441) 157-22500-14 (441) 157-42500 (441) Use suffix "508" for connector & overmold hood combination kit, i.e., 157-12500-10-(508)

order information

Part Number: 157-1869-501

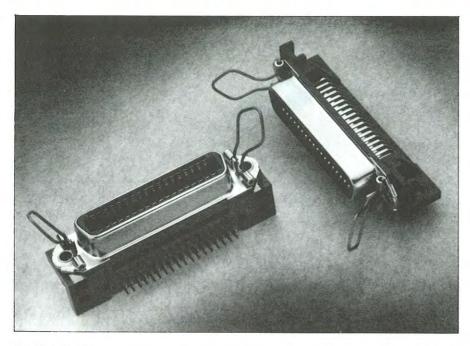


Assembly Instructions:

- 1.) Slide ferrule over the cable.
- 2.) Remove jacket insulation to appropriate length.
- 3.) Remove braid to appropriate length.
- Roll back braid over the jacket insulation.
- 5.) Terminate the connector.

- 6.) Assemble the overmold hoods.
- 7.) Roll back braid over the hoods.
- Slide ferrule over the braid such that the braid is sandwiched between the hood and ferrule.
- 9.) Crimp the ferrule.

general configuration 57LE series, right angle PC mount



description

Compatible with both Amphenol 57 series solder-type and 157 series insulation displacement-type connectors, the Amphenol 57LE series comprises a family of all-plastic Micro-Ribbon connectors unique in its versatility. Versatility that results, in part, from a flexibility of configuration that enables you to obtain an EMI/RFI shielding capability through use of metal front shells.

features

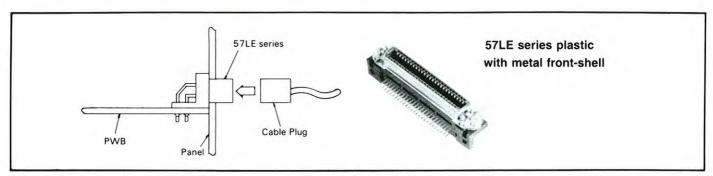
- Intermateable with Amphenol 57 series (solder termination) and 157 series Micro-Pierce® (solderless termination) connectors.
- Ribbon contacts are captivated in the connector housing to provide repeated mating and unmating without displacement of contacts.
- Availability of right angle header allows use of mass termination technology from P/C board to equipment panels.
- UL94V-O flammability rated material.
- Alternative plating for application flexibility.

general specifications

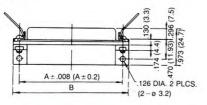
57LE

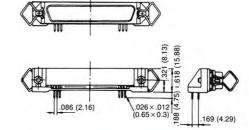
Current capacity	3 amp per contact
Voltage rating	500V AC (RMS)
Operating temperature	-55°C to +105°C
Contact resistance	35 MΩ max. at 1A DC
Insulation resistance	1000 MΩ min. at 500V DC
Dielectric withstanding voltage	1200V AC (RMS) at sea level
Contacts	Selectively gold plated
Dielectric	Polyester resin (UL 94V-0)
Front Shell (57LE)	Steel/nickel plating
Spring latch	Stainless steel

right angle connectors 57LE series metal front shell



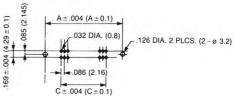




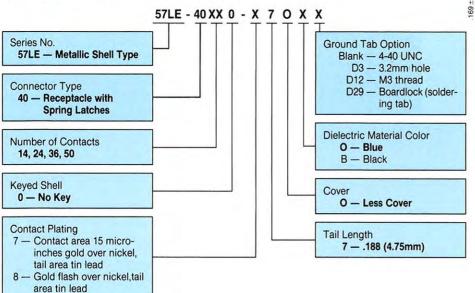


Number of	A		В		C		D	
Contacts	In.	mm	In.	mm	In.	mm	In.	mm
14	1.42	36.00	1.73	44.00	.510	12.96	1.40	35.5
24	1.84	46.78	2.16	54.78	.935	23.76	1.82	46.3
36	2.35	59.74	2.67	67.74	1.446	36.72	2.33	59.2
50	2.95	74.85	3.26	82.85	2.041	51.84	2.93	74.4

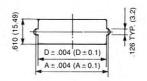
PC board layout



order information



Panel cut-out



Panel Cut Out, Botton Mounting (Thickness 1.6 MAX.)

termination tooling

Insertion Tool No. 356-251

The hand insertion/repair tool is designed for single wire termination into Amphenol 157 series connectors as well as for the opening and closing of cable clamps.



Tele-Pierce® Hand Tool No. 356-246

This versatile bench mount tool is complete and ready for in-the-field termination of all types of running cable. It can be used as a low-volume production tool. Carrying case included.



Adapter Kit No. 356-247

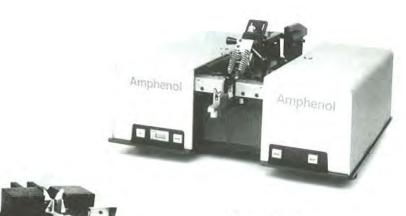
For use with No. 356-246 Tele-Pierce Hand Tool, this adapter kit allows termination of all types and sizes of top and side cable entry connectors as well as rack and panel connectors.

termination tooling

Electro-Pierce® Mark V Machine No. 359-429

The Electro-Pierce Mark V is a semiautomatic production tool for positioning and inserting cable one-pair-at-a-time into 157 series connectors. It features an internal micro-processor which controls all machine functions eliminating interconnecting cabling associated with external control units. Modularized design results in increased performance reliability and ease of maintenance. The Electro-Pierce Mark V can be programmed for termination of the complete line of 157 series connectors including 7, 12, 18, 25 and 32 wire pairs.

Also available for model "ACCU-PIERCE II" P/N 359-8157 for high volume manufacturing.

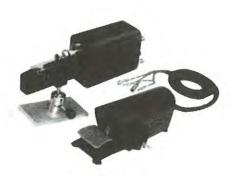


P/N 359-8157



(for overmold can) No. 358-408

Low cost pneumatic tool for hexagonal ferrule crimp. Lowers user installed cost on higher production applications. Crimp die No. 357-315-04 purchased separately.



P/N 359-429

Hand Crimp Tool (for overmold can) No. 357-315

Economical hand tool for hexigonal ferrule crimp to cable and hood. Crimp die (No. 357-315-04) purchased separately.



Crimp Die No. 357-315-04

Hexagonal crimp die for use with either hand crimp tool No. 357-315 or pneumatic crimp tool No. 358-408.



connector hardware and accessories

screws/nut

57-1523-02 #4-40 x 3/8" long slotted round head taptite screw for use on cable clamp assembly.
37-788-04 #2-56 NC-2A x 5/32" binding head machine screw with internal tooth lockwasher. Used to secure front and back shell on top and side cable entry connectors.

57-1815-02 #4-40 x 5/8" long NC-2A fillister head screw, rolled head. Long screw used to lock mated pairs of running cable connectors such as: 57-10500-7; 57-20500-7; 157-72500-3; and 57-82500-3.

34-1120 #3-48 NC2A x 5/16" long special screw for 57-60XXX connectors. 41-333-3 #3-48 Elastic nut and washer for 57-60XXX connectors. 57-1523-2P Short screw for end cable entry type (pg. 17 & 19) 57-1815-2P Long screw for end cable entry type (pg. 17 & 19)

latch

57-1002-02 Spring latch. Wire locking device used on female connectors such as 57-40XXX and 57-60XXX connectors. **57-1001-2** End disc. Retaining bracket for spring latch 57-1002-02. **57-2035-2P** Spring latch for 57B series (pg. 9)

hoods

57-1030-2 Low profile hood (large 7/8" high) used on 57-10500-14 and 57-20500-7 connectors.
57-1031-2 Low profile hood (small 5/8" high) used on 57-10500-7 and 57-20500-19 connectors.
157-1836 Low profile plastic hood used on 157-79500-X and 157-89500-1 connectors, and connectors with deviation (431)

dust cover

57-1763 Dust cover for 50 contact male or female connectors.

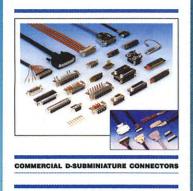
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57-1763	29		7	[[프로그램의 및 이용하다 맛이 그리고 하는데 다시다.]	
57-1815-02	29			그 그들은 일반하다면 그렇게 하기가 되어보니다.	
57-1911-01	10	그 없는데 맛있다면 사람이 있다는 데이터 그리다면 하다면 하다.	8		8
57-1912-02	10		8	- 1990 (- 1990) 610 (F. 1900) 10 (F. 1900) 1	7
57-2030		57-20360	집안된 기업에서 화면하게 끊다.	그런데 뭐가겠다는 하이네요 나타를 하다 하다 하다.	4
57-2031				57-40500(441)	
57-2039-802		_22.75551.37. 11/11/11/11	7	57-40500-04	
57-2039-902					
57-2054			7	- 보고, 있는 사람이 이번 가지 않는 그리고 아이를 하지 않는다.	
57-10140				' - ' - ' - ' - ' - ' - ' - ' - '	
57-10140-04					
57-10140-05			8		8
57-10240			8		4.6
57-10240-03		57-20500			4,6
57-10240-04			3	- 120 13 120 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4,6
57-10240-05			6		4,6
57-10240-12		57-20500-07(402)			6
57-10240-13			3		6
57-10240-14			6		6
57-10360		그 그는 맛집이라면, 살게 느르게 하게 하게 하셨다.			6
57-10360-13		그는 지금에는 그림으로 가게 되는 때문을 모르아 되었다. 그런 그림에 살아가면 어린 어린 이 때문에 다른 아이를 다 먹었다.	7	57-BX50X-XXX00	
57-10360-14			7		
57-10360-17	AND THE PERSON NAMED IN COLUMN		8	157-1869-501	
57-10360-22			7	157-12140	
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57-10500-46		"다른다는 어디지들이 아니라면서 얼마나 나를 하지 않아 있다"라면서	5	157-22360	
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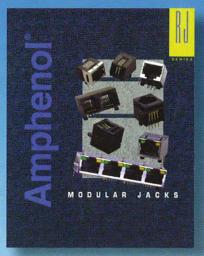
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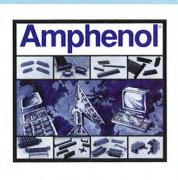
D-Subminiature Connectors



RJ Modular Jacks



FCC Filtered Connectors



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Printed in Canada

CATALOGUE NR. ADT 0005/98-03