

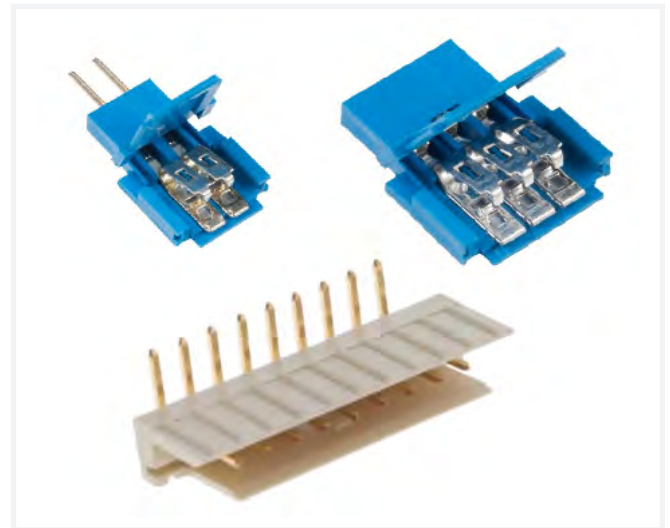
Clincher™ 2.54mm Flex Connector System

RELIABLE, LOW-COST FLEX SOLUTION FOR INDUSTRIAL APPLICATIONS

Amphenol's FCI Basics Clincher™ 2.54mm pitch connector family include single-row pin-and-receptacle connectors designed for termination to flat flexible circuitry.

Contacts are pre-loaded to connector housings enabling mass termination to unprepared cable. The "clinch" cable termination provides gas-tight, contamination-free four contact points to each conductor.

- Pre-assembled connector minimizes cable assembly costs
- Caters to Flat Flexible Cable (FFC), Flexible Printed Circuit (FPC), and Conductive Ink Circuitry (CIC)
- Dual-metal Mini-PV™ receptacle contacts
- "Clinching" contact section forms a gas-tight, four point crimp
- Ideal for terminating Membrane Switches
- Connector sizes range from 2 to 34 positions



TARGET MARKETS



FEATURES

- Pre-loaded contacts enabling mass termination to unprepared cable
- "Clinching" section of contact forms a gas-tight, four point crimp
- Dual-metal Mini-PV™ receptacle contacts
- Receptacle housing openings feature a beveled lead-in
- Two-wall PCB friction headers and polarization options
- Clincher™ receptacles mate to polarized friction headers; un-shrouded BergStik® headers and Clincher™ cable pin connectors

BENEFITS

- Accelerates cable assembly and reduces cable assembly costs
- Highly reliable connection ensuring circuit integrity and prevents contamination
- Achieve optimal interface reliability and maximizes durability (100 cycles)
- Prevents pin stubbing and assists with pin alignment
- Ensure secure mating and aid proper alignment to different types of flexible cable
- Configurable to accommodate different applications and design practices

TECHNICAL INFORMATION

MATERIAL

- Housings: Polypropylene UL 94 V-0, Blue
- Contact Body Base Metal:
 - Receptacles: Cupro-Nickel
 - Headers: Phosphor Bronze
- Contact Spring Base Metal: Beryllium Copper
- Plating, Contact Spring: 3μ Gold/GXT® or 10μ Lead-free pure Tin; all over 50μ Nickel
- Plating, Contact Body: 30μ Gold/GXT® or 100μ Lead-free pure tin; all over 50μ Nickel

MECHANICAL PERFORMANCE

- Mating and Un-mating force: 300g max. per contact (does not include latching force)
- Latch Retention: 4lbs min.; Contact retention: 30g min. per contact
- Cable Retention: 10lbs per inch of cab
- Contact Durability: 100 mating cycles

ELECTRICAL PERFORMANCE

- Contact Resistance (LLCR) Main Contacts: 10mΩ max.; 20mΩ max. after environmental exposure
- Insulation Resistance: 5000MΩ min.
- Withstanding Voltage: 1000VAC RMS
- Current Rating: 2.0A continuous per contact

PACKAGING

- Anti-static trays
- Crimping Terminal: Reel

SPECIFICATION

- Clincher™ receptacles and pin connectors
- Clincher™ right-angle and straight friction headers
- Cable Specifications:
 - Specification: IPC Standard, FC-220 B Cables type A or B, tolerance class IV
 - Cable Thickness: 0.33mm (0.013in.) max. including insulation.
 - Insulation Material: Mylar® or KAPTON® Polyimide.
 - Conductor Thickness: 0.076mm ± 0.013mm (0.003in ± 0.0005in) 305g/m²
 - Conductor Width: 1.57mm ± 0.07mm (0.062in ± 0.0003in)
 - Additional Cable Specifications: See technical drawings: TA-264, TA-37

ENVIRONMENTAL

- Operating Temperature Range: -65°C to +105°C

TOOLING INFORMATION

- Hand-tool: HT 270

TARGET MARKETS/APPLICATIONS



Logistics



Consumer Electronics



Industrial Sensing & Instrumentation



Medical

PART NUMBERS

Clincher™ Receptacle and Pin Connector	Base PN	—	Termination Variation	Pin# & Plating Variation	Actual Pin Count
Standard receptacle	65801	—	0: Conversional	02 – 32: Tin plating	2 to 32
		—	1: INK	33 – 63: Gold or GXT® plating	2 to 32
Pin connector	66226	—	0: Conversional	02 – 32: Tin plating	2 to 32
		—		33 – 64: Gold or GXT® plating	2 to 32

Clincher™ Receptacle and Pin Connector	Base PN	—	Termination Variation	Pin# & Plating Variation	Actual Pin Count
Polarized receptacle	67516	—	0: Conversional	Tin plating	2 to 16
		—	2: Conversional	Gold or GXT® plating	2 to 16
		—	5: INK	Tin plating	2 to 16
		—	7: INK	Gold or GXT® plating	2 to 16
Single row straight header with shroud	95735	—	1: Gold or GXT® plating		2 to 16
		—	4: Tin plating		2 to 16
Single row right-angle header with shroud	95736	—	1: Gold or GXT® plating		2 to 16
		—	4: Tin plating		2 to 16

PLATING DATA

Series	Series	Series	Actual Pin Count
68501 / 67516	Tin	2.54µm min. over 1.27µ Ni	0.25µm min. over 1.27µ
	Gold/GXT®	0.76µm min. over 1.27µ Ni	0.08µm min. over 1.27µ Ni
66226	Tin	2.54µm min. over 1.27µm Ni	
	Gold/GXT®	0.76µm min. over 1.27µm Ni	
95735 / 95736	Tin	2.54µm min. over 1.27µm Ni	
	Gold/GXT®	0.76µm min. over 1.27µm Ni	