

Plug-in Screw Connector System for Printed Circuit Boards

TYPE 130-A

5 mm spacing - 2 to 12 poles

 [Distributor Stock Check](#)



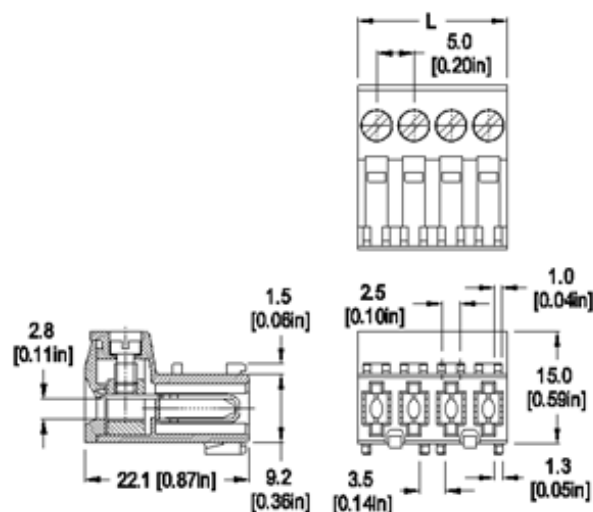
130-A



One possible variation of assembly



RoHS WEEE Pb free compliant for 130-A-021/02 and 130-A-021/03 only



Dimensions: mm (in.)

Length of Connector (L)

L = No. of Poles x Center to Center Spacing

When locating connector, allow 0.5 mm clearance around it for process-induced variations.

Description

Download the PDF above to have RAST-5 Standard detailed information.

- Plug
- standard version
- Plug-In Direction and Wire Entrance Parallel to PCB when plugged with **130-K**, **130-M**,
- Plug-In Direction and Wire Entrance Perpendicular to PCB when plugged with **130-G**, **130-H**, **900-SUN**, **900-S**, **900-W**, **GST-900-SUN**, **GST-900-SH**, **GST-BG**, **GST-BGS**, **GST-900-S** and **GST-900-W** and **GST-BGS**
- For mating with a header

Technical Data

Approval Information

UL File No.E69841

CSA File No.LR24322



Rating	Current(A)	Voltage(V)	Application group	AWG
UL	22	300	B	26-10
UL	10	300	D	26-10
CSA	22	300	B	26-10
CSA	10	300	D	26-10

Screw Tightening Torque:

UL: 4.5 lbf·in

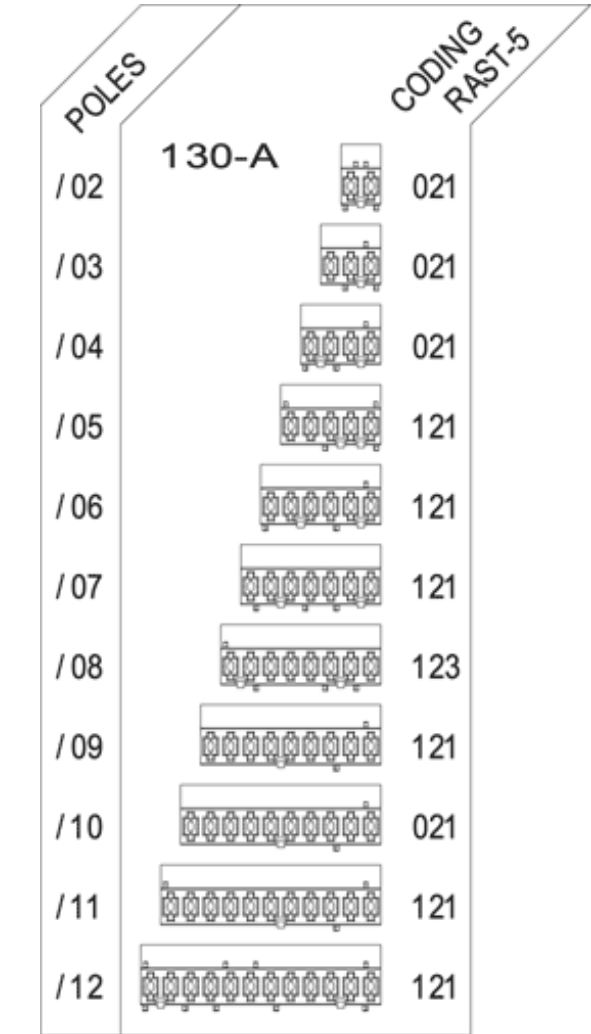
CSA: 0.51 Nm

Rated Impulse Withstand Voltage: 2500 V

Material

Center to Center Spacing: 5 mm (0.197 in.)
Nominal Cross Section:
2.5 mm² (3874 mils²)
Wire Stripping Length: 7 mm (0.28 in.)

Illustration



CODING: RAST-5 Standard

Molding: Polyamide, self extinguishing UL 94, V-0, color grey
Temperature limits:
Short Time: 140°C (284°F)
Continuous: RTI 105°C (221°F)
Low Limit: -40°C (-40°F)
Comparative Tracking Index: CTI > 600
Oxygen Index Rating: 33%

Screw: M3, yellow chromate passivated, zinc plated, steel
Terminal Body: Nickel plated copper alloy
Wire Protector and Contact Spring: Tin plated copper alloy

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How to order

Item	130-A
Options	<p>CN: Consecutive Numbering (hot stamped numbers)</p> <p>SM: Special Marking (please provide sketch)</p> <p>BS: Copper Alloy Screw</p> <p>PS: Clear Chromate Passivated, zinc plated, Steel Screws</p> <p>G05: Gold Plating (5 micro inches)</p> <p>G30: Gold Plating (30 micro inches)</p> <p>S30: Silver Plating (30 micro inches)</p> <p>WG: Wire Guide</p>

Note: Plated component: contact spring

Ordering Note: See download PDF for complete RAST-5 Standard specifications

Request sample

Request quote

Quantity

Accessories

[BST Self Adhesive Marking Strips.](#)

[Consecutively numbered.](#)

[Jumper, Type 970-J1.](#)

130-A-

CODING (RAST-5 STANDARD):
see table above

/

POLES:
02 to 12

Add to shopping cart

Plug-in Screw Connector Systems for Printed Circuit Boards

Series 13

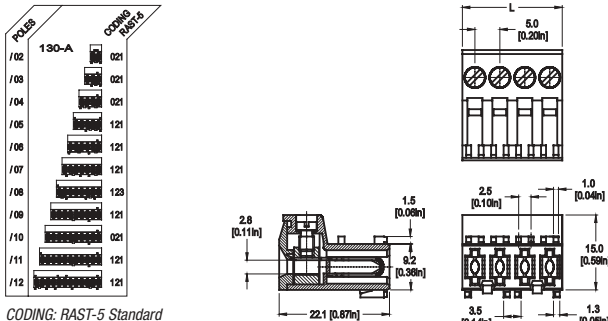
Types 130-A

5 mm spacing • 2 to 12 poles



130-A

One possible variation of assembly



Dimensions: mm (in.) When locating connector, allow 0.5 mm clearance around it for process-induced variations.
Length of Connector (L) L = No. of Poles x Center to Center Spacing

DESCRIPTION

- Plug
- Plug-In Direction and Wire Entrance Parallel to PCB when plugged with 130-K
- Plug-In Direction and Wire Entrance Perpendicular to PCB when plugged with Series 900 and GST-BGS
- For mating with a header

TECHNICAL DATA

Center to Center Spacing: 5 mm (0.197 in.) Wire Stripping length: 7 mm (0.28 in.)
Nominal Cross Section: 2.5 mm² (3874 mils²)

APPROVAL INFORMATION

	Rating	Current (A)	Voltage (V)	AWG	Application Group	Screw Tightening Torque
UL File No.: E69841	UL	10	300	26-12	B,D	max. 4.5 lbf.in.
CSA File No.: LR24322	CSA	10	300	26-12	B,D,E	max. 0.51 Nm

UL: 24-26 AWG range for factory wiring only.
Rated Impulse Withstand Voltage: 2500 V

MATERIAL

MOLDING: Polyamide, self extinguishing to UL 94, V-0, grey
TEMPERATURE LIMITS: Short time: 140°C (284°F)
Continuous: RTI 105°C (221°F)
Low limit: -40°C (-40°F)
Comparative Tracking Index: CTI > 600
Oxygen Index Rating: 33%

Terminal Body: nickel plated copper alloy
Wire Protector and Contact Spring: tin plated copper alloy
Screw: yellow chromate passivated, zinc plated, steel, M3

ACCESSORIES

- BST Self Adhesive Marking Strips. Consecutively numbered.

OPTIONS See How to Order. If more than one option is required, please separate each option with a dash (-).



CN: Consecutive Numbering (hot stamped White numbers)
SM: Special Marking (please provide sketch)
BS: Copper Alloy Screws
PS: Clear chromate passivated, zinc plated, steel screws
G05: Gold Plating (5 micro inches)
G30: Gold Plating (30 micro inches)
S30: Silver Plating (30 micro inches)
(Plated components: contact spring)

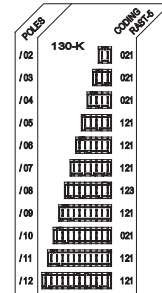
HOW TO ORDER

	CODING (RAST-5 STANDARD): see table above	POLES: 02 to 12	OPTIONS: CN, SM, BS, PS, G05, G30, S30
130-A-	/	-	

Series 13

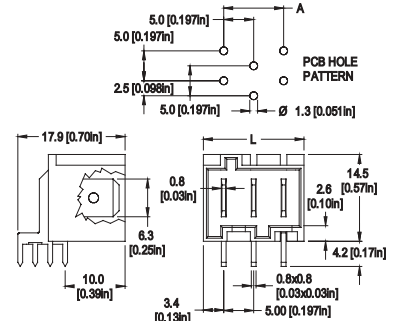
Types 130-K

5 mm spacing • 2 to 12 poles



CODING: RAST-5 Standard

Dimensions: mm (in.) When locating connector, allow 0.5 mm clearance around it for process-induced variations.
Length of Connector (L) L = No. of Poles x Center to Center Spacing + 1.8 mm
Distance between extreme pinholes (A)
A = No. of Poles x Center to Center Spacing - 5 mm



DESCRIPTION

- Header
- Plug-In Direction and Wire Entrance Parallel to PCB when plugged with 130-A, 130-P
- Interlocking tabs on top

TECHNICAL DATA

Center to Center Spacing: 5 mm (0.197 in.)
Recommended Hole Ø in PCB: 1.3 mm (0.051 in.)

APPROVAL INFORMATION

	Rating	Current (A)	Voltage (V)	Application Group
UL File No.: E69841	UL	10	300	B,D
CSA File No.: LR24322	CSA	10	300	B,D,E

Rated Impulse Withstand Voltage: 2500 V

MATERIAL

MOLDING: PBT, self extinguishing to UL 94, V-0, grey
TEMPERATURE LIMITS: Short time: 200°C (392°F)
Continuous: 130°C (266°F)
Low limit: -40°C (-40°F)
Comparative Tracking Index: CTI > 600
Oxygen Index Rating: 32%

Solder Pin: tin plated copper alloy, 0.8 x 0.8 mm (0.03 x 0.03 in.)

HOW TO ORDER

	CODING (RAST-5 STANDARD): see table above	POLES: 02 to 12
130-K-	/	

RAST-5 Standard Specifications

The 130-connector system consists of PCB mounted headers mated with plugs equipped with wire entries. Often called the RAST style connector an acronym for the German "Raster Anschluss Steck Technik". Loosely translated into English "Connection pitch plug technique".

It was developed for the white goods industry with the intent on bridging the gap of existing point-to-point quick connections utilizing tabs and receptacles (quick connect) the safety and standardization of keyed and coded plugs and headers connectable to each other and to the existing technologies.

White goods are the large household electrical appliances such as washers, dryers, refrigerators and stoves. The American and European white goods industries have similarities and differences. Solutions to safety, environmental, cost effectiveness, manufacturability and regulatory challenges often differ slightly and sometimes differ greatly.

The 130-series PCB mounted header is of 5 mm pitch and is thus considered to be RAST-5 type. All RAST-5 type components are standardized and are, in principle, all interchangeable from manufacture to manufacturer. They fit one into the other when required and they do not fit when the standardized coding purposely prevents it.

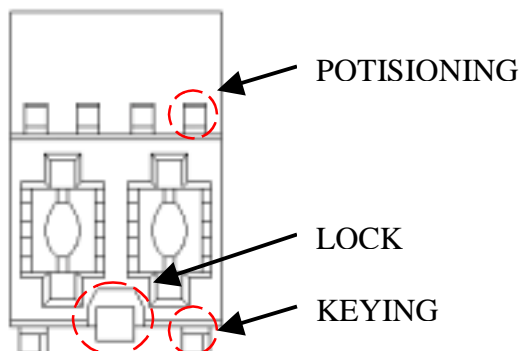
The PCB mounted headers contain 6.3 mm standard tabs (often called tags). They are equivalent to the tabs often seen standing alone on PCBs such as WECO's GST series, exposed but supported by moulding at specific pitches such as WECO's 900-S/ -SUN/ -W-5 series or on wire harnesses. The headers can mate with the 130-series plugs or with individual 6.3 mm quick connect receptacles. The wire-mounted plugs contain tuning fork type spring contacts that mate well with the 130-headers, with the 900-series headers or with individual 6.3 mm tabs.

There are multiple advantages to this system

- Components are standardized and can mate with each other independently of make.
- Labor costs are reduced when adapted to automated harness manufacturing processes.
- The probability of plugging errors and damage caused by this is reduced by the replacement of numerous individual connections by multi-contact polarized systems.
- The key coding polarization system can effectively prevent incorrect connections during assembly and maintenance. It prevents wrong plugs into wrong sockets, backwards connections and misaligned connections. This is especially important in appliance where wrong connections can damage internal components. For example many appliances utilize a combination 120 volt and 240 volt circuitry as is common in North America. The consequences of misconnections can be component malfunction or destruction.
- The key coding system has explicit standards that are implemented by all manufacturers.
- Customized key coding can be designed from the ground up to meet any OEMs needs for protection and interchangeability.
- An increase in infield reliability resulting in a reduction in warranty repair costs and an increase in consumer satisfaction in a very competitive industry.

WECO's 130 series can handle 20 amperes although at present they are listed at UL and CSA at 10 amperes. This is a temporary situation that is being updated.

RAST-5 Standard Specifications



You can order RAST-5 Standard configuration or provide a sketch for custom configuration.

Custom configuration

For the 130-A plug configuration, place the positioning and the keying as needed. The locks are fixed. Mark with an X the positioning and the keying you want to remove. Note that the header must be molded accordingly. Please consult factory for lead time.

RAST-5 Specifications for Series 130 Codierfix

Pole	Standard Configuration	Code
02		021
03		021
04		021
05		121
06		121
07		121
08		123
09		121
10		021
11		121
12		121

Pole	Custom Configuration
02	
03	
04	
05	
06	
07	
08	
09	
10	
11	
12	