



## **PRODUCTS**



**CROSS-REFERENCE** 

Print

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## Plug-in Screw Connector System for Printed Circuit Boards

3D Model

Can plug with

How to order

**TYPE 130-A** 

Series

5 mm spacing - 2 to 12 poles
Distributor Stock Check



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10000

Download PDF

120 /



One possible variation of assembly



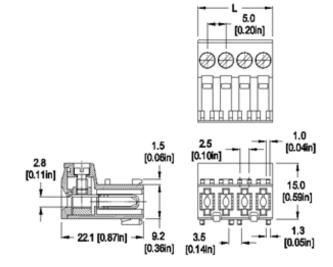
RoHS WEEE Pb free compliant for 130-A-021/02 and 130-A-021/03 only

## **Description**

Downland 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**



Color specifications

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.

## **Approval Information**

UL File No.E69841 CSA File No.LR24322

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

## **Screw Tightening Torque:**

UL: 4.5 Ifbin CSA: 0.51 Nm

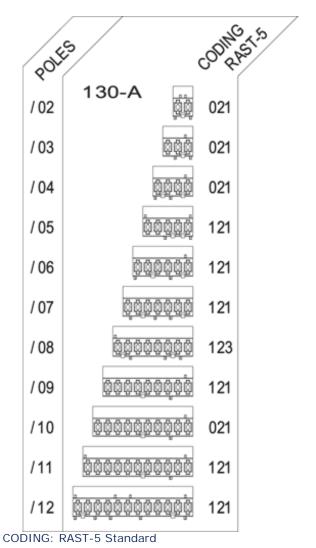
Rated Impulse Withstand Voltage: 2500 V

Center to Center Spacing: 5 mm (0.197 in.)

**Nominal Cross Section:** 2.5 mm<sup>2</sup> (3874 mils<sup>2</sup>)

Wire Stripping Length: 7 mm (0.28 in.)

### Illustration



Temperature limits:

color grey

**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,

Molding: Polyamide, self extinguishing UL 94, V-0,

**Terminal Body:** Nickel plated copper alloy Wire Protector and Contact Spring: Tin plated

copper alloy

## How to order

130-A Item

**Options** 

SM: Special Marking (please provide sketch)

BS: Copper Alloy Screw

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)

WG: Wire Guide

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.

CODING (RAST-5 STANDARD): see table above

POLES: 02 to 12

130-A-

Add to shopping cart

2008, WECO Electrical Connectors Inc.

ISO 9001 registered quality management system

## Series 13

## Types 130-A

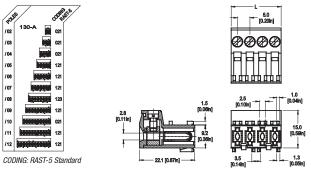
## 5 mm spacing • 2 to 12 poles





One possible variation of assembly

130-A



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

Plug

BOARDS

CIRCUIT

PRINTED

FOR

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BLOCK

TERMINAL

- 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.) Nominal Cross Section: 2.5 mm<sup>2</sup> (3874 mils<sup>2</sup>) Wire Stripping length: 7 mm (0.28 in.)

## APPROVAL INFORMATIO

	Rating	Current (A)	Voltage (V)	AWG	Application Group	Screw Tightening Torque
File No.: E69841	UL	10	300	26-12	B,D	max. 4.5 lbfin.
File No.: LR24322	CSA	10	300	26-12	B,D,E	max. 0.51 Nm
UL: 24-26 AWG range for fac	ctory wiring	only.				
Rated Impulse Withstand V	/oltage: 25	00 V				

MOLDING: Polyamide, self extinguishing to UL 94, V-0, grey 140°C (284°F) TEMPERATURE LIMITS: Short time: RTI 105°C (221°F) Continuous:

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

BST Self Adhesive Marking Strips. Consecutively numbered.



CN: Consecutive Numbering (hot stamped White numbers)

SM: Special Marking (please provide sketch)

BS: Copper Allov Screws

**PS:** Clear chromate passivated, zinc plated, steel screws

GO5: Gold Plating (5 micro inches)

**G30:** Gold Plating (30 micro inches) **S30:** Silver Plating (30 micro inches)

(Plated components: contact spring)

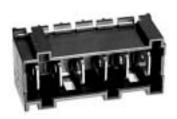
### **HOW TO ORDER** CODING (BAST-5 STANDARD): POLES: OPTIONS: see table above 02 to 12 CN. SM. BS. PS. G05. G30, S30 130-A-

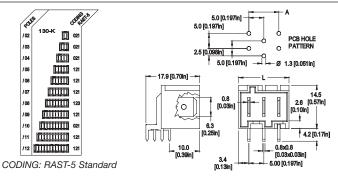
## www.weco.ca/products/130-A

## Series 13

## Types 130-K

5 mm spacing • 2 to 12 poles





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

Header

Plug-in Screw Connector Systems for Printed Circuit Boards

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

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

	Rating	Current (A)	Voltage (V)	Application Group
<b>File No.:</b> E69841	UL	10	300	B,D
<b>File No.:</b> LR24322	CSA	10	300	B,D,E
Rated Impulse Withstand \	Voltage: 25	500 V		

MOLDING: PBT, self extinguishing to UL 94, V-0, grey

200°C (392°F) TEMPERATURE LIMITS: Short time: Continuous: 130°C (266°F) -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.)

130-K-	see table above	02 to 12	
	CODING (RAST-5 STANDARD):	POLES:	
HOW TO OR	DER		

## **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.

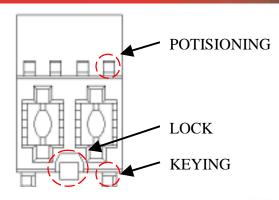
The PCB mounted headers contain 6.3 mm standard tabs (often called tags). They are equivalent to the tabs often seen standing alone on PCBs such as WECO's GST series, exposed but supported by moulding at specific pitches such as WECO's 900-S/-SUN/-W-5 series or on wire harnesses. The headers can mate 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	ole Standard Configuration	
02		021
03	000	021
04	0000	021
06	ធ្វាន្ត្រាស់	121
06	<b>එකිකම්ක්</b> ම	121
07	000000000	121
08	<u>ଜୁପିବରରସିହିତ</u>	123
09	9999999	121
10	00000000000	021
11	00000000000000	121
12	000000000000000000000000000000000000000	121

Pole	Custom Configuration
02	
03	<u> </u>
04	<u> </u>
05	<u> </u>
06	000000
07	0000000
08	00000000
09	000000000
10	0000000000
11	000000000000
12	000000000000000