

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

971-SLR | 5.00 mm (0.197 in) Spacing - 2-24 poles

### PICTURES



971-FBS-DS & 971-SLR



971-SLR

### TECHNICAL INFORMATION

#### Description

The pin strip header type 971-SLR replaces the former type 971-SLK. It is a 5 mm pitch pin strip header with pins that are 1.0 mm diameter at the PCB end and 1.3 mm diameter at the plug end. For other non standard pins please see PDF document in the Download Center.

It is suitable for both, wave soldering process, and high temperature soldering process. The product is built out of materials which meet RoHS soldering temperature and tin whisker mitigation requirements.

Molding: the high temperature resistant resin.

Pin: Matte tin and nickel plated copper alloy pin.

Standoffs on the plastic part allow hot-air circulation near the solder lands and inspection of the soldered pads.

The pin strips type 971-SLR can be packed with removable pick caps in deep embossed tape and reel, suitable for auto-loading pick and place processes.

They can also be supplied loose in cartons for hand placement.

For through hole reflow process applications (THR) WECO is offering the type 971-SLR-THR. There is a difference in design of the PCB portion of the pin.

Pinstrip

Vertical version

Flat base

Available by request up to 32 poles

#### Technical Data

**Center to Center Spacing:** 5.000 mm (0.197 in)

**Recommended Hole Diameter in PC Board:** 1.300 mm (0.051 in)

#### Bill of Materials

**Molding :** HT Polyamide, Self extinguishing UL 94, V-0

**Color :** Black

**Temperature limits :**

**Short Time :** 260°C (500°F)

**Continuous :** 105°C (221°F)

**Low Limit :** -40°C (-40°F)

**Comparative Tracking Index :** CTI ? 600 V

**Oxygen Index Rating :** 28 %

**PCB Pin:** Tin plated copper alloy 1.0 mm



**PCB Pin:** Tin plated copper alloy 1.3 mm

**Application**

971-SLR is designed for printed circuit board (PCB) through-hole re-flow soldering or wave soldering processes. Insertion forces can be adjusted to customer requirements: 1.3 mm diameter plug ends have higher insertion forces than 1.1 mm diameter plug ends. An application with few poles may favor the 1.3 mm diameter pin. With more poles it could favor the 1.1 mm diameter pin. In field applications involve thermostats, hygrostats, HVAC controls, process control, automation, robotics, AC or DC drives, remote controls...

**APPROVAL INFORMATION**

UL File No. E69841 | CSA File No. LR24322

Type	Current (A)	Voltage (V)	Application Group	AWG	Screw Tightening Torque
 971-SLR 5.0 mm	10	300	B		
 971-SLR 5.0 mm	10	300	B		

current rating 12 A when connected with plug from series 115-F

**PLUGGING PARTS****Plug-in direction and wire entrance perpendicular to PCB**

**TYPE 971-FBS (-DS)**  
5.00 mm spacing - 2-24 poles

**Plug-in direction perpendicular to PCB and wire entrance parallel to PCB**

**TYPE 115-F-111**  
5.00 mm spacing - 2-12 poles



**TYPE 115-F-118**  
5.00 mm spacing - 2-12 poles



**TYPE 115-F-211**  
5.00 mm spacing - 2-12 poles



**TYPE 950-FL-DS**  
5.00 mm spacing - 2-24 poles



**TYPE 950-GFL-DS**  
5.00 mm spacing - 2-24 poles



**TYPE 950-NAF-DS**  
5.00 mm spacing - 2-12 poles



**TYPE 950-NLFL-DS**  
5.00 mm spacing - 2-12 poles



**TYPE 950-RNF-DS**  
5.00 mm spacing - 2-12 poles



**TYPE 950-T-FL-DS**  
5.00 mm spacing - 2, 3, 8 poles



**TYPE 958-FL-DS**  
5.00 mm spacing - 2-24 poles

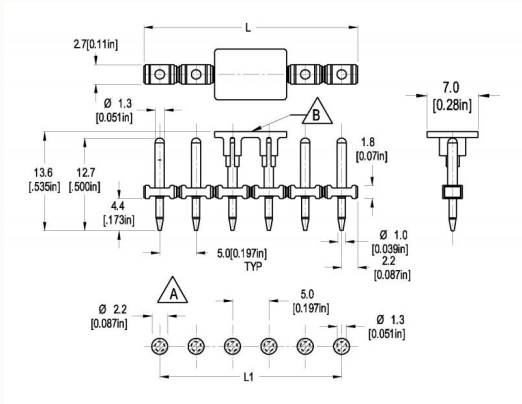


**TYPE 958-NLFL-DS**  
5.00 mm spacing - 2-12 poles



**TYPE 970-FBW (-DS)**  
5.00 mm spacing - 2-24 poles

**TECHNICAL DRAWING**



**Description :**

Length of Pinstrip (L)

$L = \text{No. of Poles} \times \text{Center to Center Spacing}$

(A) Recommended Pod Layout

**SECTION A - SERIES 96 AND SERIES 97****Terminal Blocks for Printed Circuit Boards**

Series 96 (inch spacing) and 97 (metric spacing) blocks have a higher profile than the Series 94 and 95 and provide larger clearance and creepage distances. This often provides a better current rating. The horizontal wire entry blocks have a raised base to allow the flow of flux and solvents during the soldering and cleaning phases of the soldering process.



These strips are available in solid 2-32 positions and can also be ordered in the dovetail version (-T) with 2 and 3 poles per block the dovetail system allows them to be assembled together in the needed combination to provide the designer with the needed number of positions while maintaining center-to-center pin-spacing. The dovetail system greatly reduces inventory needs and speeds up delivery. This series is provided with captive screws.



For the 9 to 32 pole version, molding are fiberglass-filled polyamide to provide longitudinal rigidity while maintaining the UL 94 V-0 rating this also allows higher process temperature limits.

These two series provide many versions and features that make them an excellent choice to overcome many design challenges and requirements.

Each product has a "How To Order" area as well as a complete listing of UL and CSA approval specifications, available options and accessories.